GEORGE MOSS V. COOPER TIRE & RUBBER COMPANY

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

Civil Action No.: 3:11-CV-00689-FLW-LHG

PLAINTIFF'S EXHIBIT D

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

GEORGE MOSS	§	
Plaintiff,	§	
v.	§	**CIVIL ACTION**
	§	**NO. 3:11-CV-00689-FLW-LHG**
COOPER TIRE & RUBBER COMPANY	§	
Defendant	§	

AFFIDAVIT OF TROY COTTLES

I, TROY COTTLES, BEING OF LEGAL AGE, SAY AND DEPOSE AS FOLLOWS:

1. My name is Troy Cottles. I have been retained by the Plaintiff to examine a tire manufactured by defendant, Cooper Tire and Rubber Co. I have previously submitted an affidavit in this case in which I have set forth my credentials and addressed certain issues that have arisen thus far in this litigation. This affidavit is intended to supplement my previous affidavit and to clarify and/or address certain engineering issues and the relationship of these issues to the documents requested of Cooper Tire by the Plaintiff.

2. Over the course of my career, I have examined thousands of tires that failed in service, the vast majority of which were steel belted radial tires. Since leaving the tire industry, I have examined a number of Cooper-made tires that suffered a belt/belt detachment. By a belt/belt detachment, I am

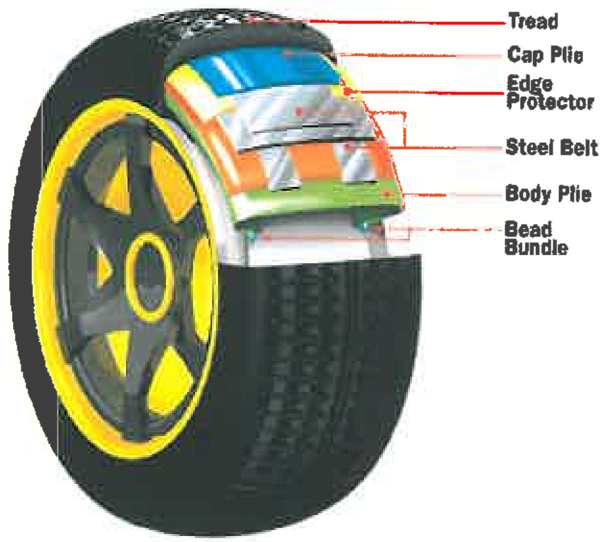
describing a situation where the tread, under tread and outer most steel belt has separated or detached from the inner most steel belt.

3. Cooper has alleged in this and other litigation that there can be no design defects in its broad line tires because its tires are tested for conformity to the dictates of Federal Motor Vehicle Safety Standard 109. Cooper has contended that documents relating to the design of its broad line tires are irrelevant to this litigation because of the compliance with a government standard. Nothing could be further from the truth.

4. Federal Motor Vehicle Safety Standard (FMVSS) 109 was a safety standard passed by the government relating to bias tires that have not been made for general consumer use since the invention of the steel belted radial tire decades ago. Even at the time the standard was promulgated, it was a minimum standard. Because this is destructive testing, the testing is performed on a sampling basis. The testing is conducted on new tires and allows for retesting in the event that failures arc encountered during the initial testing. No test required by FMVSS 109 can test a tire for its resistance to belt/belt detachments or the late life durability of any lire.

5. This safety standard is meaningless in this case because the tire failure occurred more than 3 years after the manufacture of the tire and no FMVSS test can determine the presence of design defects that give rise to late life failures of tires. Cooper's efforts to develop such a test had met with consistent failure and delay. In this regard, Cooper was at least a decade behind the rest of the tire manufacturers in the United States, and the major foreign manufacturers.

6. The diagram below illustrates the basic components of a tire.



7. The basic components of a tire are put together by hand according to a tire manufacturer's design specifications. The result is a soft, pliable "green" tire. The green tire is then "vulcanized" or cooked at a certain temperature (usually 350 degrees) for a set period of time. During the vulcanization process, the different components are supposed to chemically bond to one another and the final result should be a tough, durable tire. Molds are used to give tires their tread patterns and outer markings. As explained by Mr. Cottles, the basic tire components are follows:

- **TREAD:** The tread is the portion of the tire in direct contact with the road surface. Treads are made in different patterns that correspond with desired use (i.e. Off-road v. highway).

- **SUBTREAD:** The subtread is the layer of rubber lying directly beneath the tread and above the upper steel belt. The subtread serves two primary functions for consumers. It provides additional insulation between the road and the vehicle for a softer ride. It also contributes to the tire's rolling resistance, or fuel economy, and performance.

- **BELTS:** The belts are strips of rubber with strands of steel wire cable running through the rubber at an angle (also referred to as "bias") to the edge of the belt. In most steel belted radials, the belt system consists of two layers or plies whose steel cords run in different directions to form a triangulated structure. The belt package is very stiff, which in turn provides cornering and handling ability. The stiffness of the belt also acts as a stabilizer, reducing the movement in the elements of the tread to provide traction and

reduce wear. Most steel belted radials have two belts, which are referred to as the "upper" or "top" belt and the "lower" or "bottom" belt. The steel cord used in the belts consists of multiple filaments twisted together to form a cable. Each belt consists of a layer of rubber with a series of brass-plated steel cables running diagonally through it at an angle to the edge of the belt. The cables must be bonded securely to the surrounding rubber. The steel filaments used in the cables within the belt are plated to a thin layer of brass alloy to enhance bonding, which is achieved by means of a chemical reaction between this brass plating and the surrounding rubber in the belt. This reaction takes place under the influence of high heat and pressure when the complete tire is cured, or vulcanized, after the components have been assembled. The bonding reaction involves complex chemical changes in the brass plating and the adjacent surrounding rubber, which causes the molecules of the two substances to link with each other.

- **SKIM STOCK:** The rubber used between the steel belts is referred to as "Skim Stock". Skim stock is what makes the belts adhere to one another. Skim stock consists of a mixture of various chemical ingredients, including anti-degradants (added to resist deterioration and loss of physical and adhesive properties), reinforcing agents (added to make the tire sufficiently malleable), and accelerators (added to cause the molecules of the compound to knit together when a particular temperature and pressure are applied for a given length of time during the vulcanization process). The actual skim stock formula is referred to by a certain internal code.

- **WEDGE:** Also known as Belt Edge Gum Strips. A tire's wedge (if it has one) is a rubber insert between the ply and belts. It helps to keep the tire level and flat with the road. Additionally, it provides stiffness at the belt edges. Cooper's Mastercraft does not contain a wedge. If the halogenated butyl is not the correct concentration, air can seep through the wall causing a tread separation.

- **INNERLINER:** The innerliner is the inner most layer of the tire. Its main functions are to retain the compressed air inside the tire and tire pressure. Due to its low air permeability, butyl rubber, or halogenated butyl rubber compound, is the primary rubber compound used.

- **SIDEWALL:** The sidewall of a tire protects the plies from possible damage. It also provides flexibility to the tire, which contributes to the ride and stability characteristics of an automobile. The sidewall contains information that helps to identify the type of construction as well as the tire size, aspect ratio, speed rating, date of manufacture and the location of manufacture.

- **BEAD:** The Bead component of the tire is a non-extensible composite loop that anchors the body plies and locks the tire onto the wheel assembly. The

bead wire loop is made from a continuous steel wire covered by rubber and wound around with several continuous loops.

8. Although the incorporation of steel belts into tires offers the advantages of additional impact and puncture resistance, it also presents a design problem. The rubber compounds routinely used in the manufacture of the steel belted tires will not adhere to the steel wires used to make the steel belts. In order to gain proper adhesion, manufacturers must coat the steel wires before incorporating them into the tire construction. The inherent physical differences between steel and rubber in their flexibility, however, create a potential for tread separations.

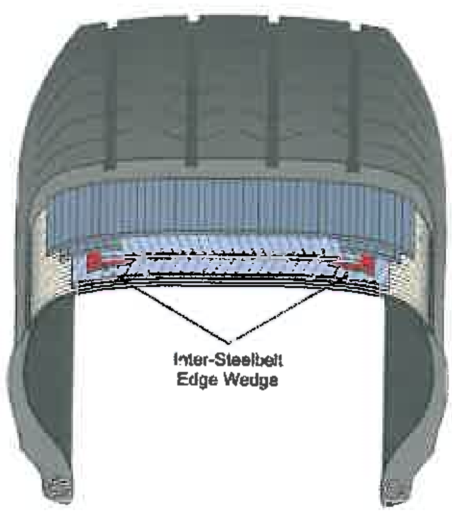
9. The following photograph depicts the subject tire after suffering a tread separation:

10. A tire manufacturer should incorporate in the tire design adequate countermeasures to defeat this

inherent potential toward separations. It is generally acknowledged that the shoulder of the tire is the location in the tire that develops the highest stresses and heat buildup. This stress can lead to a treat separation. Various mechanical and chemical solutions have been developed to reduce the heat, to protect against the effects of aging of the polymer materials and to diffuse the stresses.

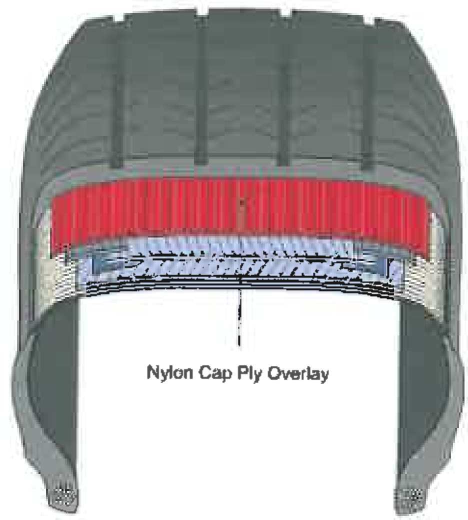
11. One of the most commonly employed devices to help prevent a tread separation is the incorporation of a belt wedge, which is placed between the outer and inner steel belts at the belt edge. This wedge is generally triangular in shape and serves both to reduce heat and to diffuse stress.

12. The following is an illustration of a tire with a belt wedge:



13. Another effective means of dealing with the potential for tread separation is the use of a nylon cap or nylon edge strips, which are placed on top of the outer steel belt to act as a tourniquet to restrain the movement of the belts at the shoulder edges.

14. The following is an illustration of a tire with nylon cap plies:



Cooper's Mastercraft does not contain a belt wedge or Nylon Cap and is therefore susceptible to tread separation.

MANUFACTURING A PASSENGER OR LIGTH TRUCK STEEL-BELTED RADIAL TIRE

15. The raw materials required to produce a steel-belted radial tire include both synthetic and natural rubber types. In all, a single tire may have more than thirty five different processed component parts.

16. The tire will include chemicals to assist in the bonding of one component to another, to reduce the effects of oxygen and ozone degradation, to accelerate and activate chemical bonds and molecular cross-linking of polymers and fillers and salts, and to improve the process-ability of the rubber compounds through the Banbury mixing process, rubber mills, and extruders.

17. Ingredients called fillers are the building blocks of the rubber formulas. These include clays, carbon blacks, zinc oxides, silica, and others. They each provide strength to the rubber formulation, as well as other properties.

18. The Banbury is a giant blender which mixes rubber in large batches. Operators use a batch recipe for a specific rubber formulation type and add the proper number of bales of natural rubber, synthetic rubber, aromatic or naphthenic oils, wax, sulfur, and other curatives onto a weigh station conveyor

which is fed into the Banbury. Loose items like carbon black or silica are conveyed in from outside silos to reduce the environmental impact of handling the dusts. Within the Banbury high heat and pressure is applied to the batch.

19. The rubber batch is removed hot from the Banbury, but as it cools it is processed as slabs of rough rubber stock. The slab stock is further processed on breakdown mills, which masticate the rubber between pairs of rollers continuously until the compound can be properly worked onto another mill type called a feed mill. The feed mill prepares the milled stock to be fed through an extruder die to become components such as tread or sidewall stock.

20. Other rubber types are used for skim on fabrics used in the tire, such as polyester, nylon, and rayon. These could be nylons used as cap plies, body plies, bead bundle wraps or flippers, sidewall inserts, or chafers. In today's radial passenger tires polyester and rayon are more highly utilized as body ply fabrics than nylon. The processing of rayon is not as environmentally friendly as polyester, but continues to be used heavily in the European market. Though some rayon is used as ply material in North American produced tires, the expansion is in polyester. Still other rubber formulations are used as skims on the steel belts.

21. After all calendered fabrics, extrudants, and calendered rubber are processed the tire can be assembled.

Bead

22. Once the correct links are inserted on the bead winder to hold the desired inside bead diameter, the specified bead configuration can be produced. The strands of wire are run through a cold-feed extruder to coat the wires in a layer of rubber. Whether by a taped bead assembly (turns and strands) or by a single wound bead (hexagonal or polygonal), the final bead assembly is a hoop of layered steel wires embedded in rubber.

23. Some manufacturers staple the loose end to the rest of the bundle. Some spiral a nylon thread around the splice point at the last wire end. Some wrap the entire wire bundle length in a coated nylon wrap. While some have increased the tack properties of the rubber coat sufficiently to keep the last turn of wire(s) from lifting off the hoop during tire building and curing.

24. The next process might be the application of a bead apex to the bead bundle. With a bead bundle width of four, five, six, or seven strands wide, a natural void occurs above the bead due to the difficulty of getting the plies to conform around the square or polygonal shape of the bead. To remedy this, a rubber filler (apex) is installed atop the bead bundle. Dimensionally, these can range from as small as one half inch in height to several inches tall. Of course, the smaller the apex, the less performance it actually contributes in its ability to stiffen the lower sidewall and damp inputs, as discussed earlier under the tire design heading.

25. To countermeasure against the apex separating from the bead bundle in tire building, curing, or in-field service, some manufacturers utilize a coated nylon "flipper" material to wrap the bead bundle and adhere to the apex, reducing the likelihood of damage due to the handling involved in the tire manufacturing process, when the components are still "green" and not chemically bonded to each other during the curing of the tire.

26. At the tire building machine two bead assemblies (bead and apex), would be set in retainers outside the main tire building drum. These are held in place until after the innerliner and plies are assembled, then the beads are drawn in to the sides of the drum above the edges of the innerliner and plies. At this point the innerliner and ply edges would be folded over the bead (creating the ply turn ups for the green tire and locking the beads into position).

Innerliner

27. To eliminate the inner tube in radial tires, the innerliner was developed to sustain inflation pressure in the tire and be a rubber veneer cured directly to the plies. In the early 1980s, the innerliner was for many manufacturers purely a natural rubber component—the result being unfavorable long-term air retention. In the worst cases, new tires mounted on OE vehicles would be flat again before the vehicle left the shipping lot outside the vehicle manufacturer's property.

28. Clearly, synthetic chemical agents were required to assist the air retention properties. Halobutyls have since been used in higher and higher concentrations to improve resistance to air permeation. Chloro-butyls and bromo-butyls are popularly utilized in many of today's radial passenger and light truck tires.

29. The innerliner is prepared as a flat sheet. Some manufacturers may produce innerliner as a single pass material with a specified gauge. Others prepare it in two passes of nearly equal gauge resulting in the final specified gauge. While yet others differ the chemical composition of the two layers—one a natural rubber barrier and the other a butyl layer.

30. The innerliner is supplied to the building machine in a roll of fabric or vinyl liner. It is pulled through the servicing trays on a building machine and applied in one or more rotations around an expanded drum. Some tire makers would consolidate a chafer material (fabric or gum) to the ends of the innerliner width, in order to place this material in proper position to protect the tire from excessive rim chafing in use.

31. At the building machine the first component to be applied to the drum is the innerliner. Once the innerliner is applied to the drum and the drum is rotated one revolution (two if the innerliner gauge is processed at half gauge to eliminate a set up change in the area of innerliner manufacture), special care has to be taken with the innerliner to ensure the splice is properly sealed.

32. In the *green* state, the only seal of the splice is the tack level the innerliner has to itself, which should be assisted by roller stitching the splice location. If this is not properly done, the splice may open later to allow a conduit for oxidative attack on the internal components of the tire, resulting in chemical aging and degradation.

33. Also, if the splice is too blunt (lacking a skive angle), it creates a dam for trapped air during the curing process. This also can gather at the splice location to create an opportunity for air infiltration throughout the tire's use.

Plies

34. The body plies of the tire are also delivered to the tire building machine in a liner roll. In a two-ply tire, the plies are typically cut at a different width from each other. Care must be given to maintaining a minimum distance between the turn up heights of each ply (or any other component) so as not to create coincidental endings of materials. These act as hinge points during the flexing of the tire's sidewall region.

35. Establishing the first ply as the wider ply allows for the outer ply turn-up to protect all internal fabric endings beneath. This technique is not necessarily universally applied by the different tire manufacturers, however. Both plies typically are wider than the innerliner widths in a 2-0 construction.

36. When speaking of "radial" tires, we are speaking of the direction of the body plies in relation to the direction of travel. One convention of identifying the angle of radial tires is to specify the plies as being at 90 degrees within the tire. The plies are applied over the innerliner on the building drum, (rotated) and spliced to ensure the plies do not "pop open" during the rest of the building sequence or at the time of curing. An inadequate splice will result in tire failure along the ply splice.

Sidewall

37. The sidewalls which have been extruded through single, dual, triple, or quadruple head extruders are delivered to the building machine in rolls. These might be supplied to the building machine in separate rolls.

38. The use of a single-head extruder would imply the entire sidewall consisted of only one rubber compound. In a typical case, a sidewall formed through a dual extruder head may have a sidewall compound and a rim protector compound in the lower sidewall region. A triple extrusion might consist of a separate compound to be positioned under the belt edges as a belt cushion, a sidewall compound, and a rim protector compound. An example of a quadruple-head extruder would be the same as the three head extrusion, with perhaps a white sidewall compound included for the raised lettering or stripe in the tire.

39. Once the plies have been turned over the bead, the next component to be assembled is the sidewall. The drum is again rotated and the sidewalls are cut on a skive angle by a heated knife and the splice is stitched. After this step, automatic stitchers on the building machine may be used to increase the green tack among all components, while removing as much trapped air as possible between layers.

40. The resulting assembly resembles a rubber tube or sleeve. In the next stage the tire will be shaped more closely to the appearance of a final cured tire.

41. This completes what is termed the "first stage" building process. From here, the first stage body carcass is transferred to the second stage machine, unless a single-stage building machine is being utilized, where the same drum is used to complete all assembly.

42. At the second stage machine, the steel belts, nylon cap plies, and tread piece are applied onto a drum which is set to a larger diameter, in order to be later transferred onto the inflated first stage carcass.

Steel Belts

43. There are basically two methods in use to prepare a standard steel belt. The older method entails processing a roll of calendered steel and cutting six to nine inch pieces of the belt on a given bias angle. These individual strips are then zipper-stitched together to create a longer roll of belt material at the desired sheet width and belt angle to be used for a specific tire. Prior to rolling up the stitched belt segments, a belt edge gumstrip or belt wedge component might be included on the first belt to consolidate tasks. A length of this belt material adequate to cover the circumference of a tire might have six to nine wire splice locations. Some of the shortcomings of this technique are:

a. Poor guide control on the zipper-stitcher operation allows for "floating" of the individual belt pieces along the conveyor. This creates irregular belt edge endings from one piece to the other. In the finished tire, these create opportunities for wires in the same belt to come into contact with each other during flexion. Obviously, this creates some level of "snaking" between belts, which can result in belt to belt contact.

b. Multiple cut lengths of wire in each belt segment results in multiple wires per tire having inadequate rubber skim coverage.

c. Multiple wire overlaps due to the splicing of those six to nine belt splices per belt means one or more wires in each segment per belt can have wire to wire contact, which eventually wears through any available belt skim in loaded tire operation.

d. Shelf life is an issue with this technique because the time it takes to produce a belt length for even one tire is lengthened as compared to more recent methods. This involves the belt remaining in the roll or liner longer than other components, which in many cases results in

liner pattern marks on the belt skim, which impede proper bonding to the next belt's skim during tire curing, resulting in imminent belt separation.

e. Humidity-controlled environment also is an issue, because many times this equipment was not installed within the temperature and humidity controlled portions of the manufacturing facility resulting in early sulfur bloom of the belt skim stock and moisture attack on the exposed steel wires, both of which are known to result in a failure to create a properly bonded belt system in the tire.

f. Wire spacing within a Steelastic belt is often inconsistently spaced. These irregularly spaced wires ultimately result in large enough voids between belts to require the available skim to flow into the voids during the curing process. The flow of skim into open splices or irregular wire spacings creates a reduction in the available skim gauge in those specific areas, which has generated unnecessary heat within the belt systems causing belt to belt separations in tires.

44. Another technique for preparing steel belts which has been available to the industry since at least the late-1980s, is the use of larger creel calenders to uniformly space the belt wires and to handle the wires in a temperature and humidity-controlled area. The creeled wires are fed through a combset (approximately four to six feet wide) to a mill where the skim is embedded into and onto the wires. This is rolled and delivered to a shear cutter which has been set to the desired belt angle. The belt is cut to width on the proper angle. Normally one cut is sufficient for the circumference of a tire of smaller overall diameter.

45. This method produces a uniform belt edge position for the entire cut. It involves only a single splice in the first belt and a single splice in the second belt. The belt edge gumstrip or belt wedge can also be consolidated on the rollup of the cut belts in the liner. Belt cuts for multiple tires can be achieved in the same time it takes to assemble several belt segments into a single tire belt on the Steelastic-type equipment, so that not only is there efficiency in the operation, but the belt material is not exposed to environmental effects any longer than necessary.

46. On the second stage drum, the first belt (perhaps with belt wedges) is applied first. The drum is rotated and the belt is cut with a hot knife along the path of the steel cords. The ends are butt-spliced together.

47. The second belt is now applied centrally over the first, rotated, and spliced the same as the first belt. In order to ensure proper positioning of the steel belts, a guidance system is normally applied to reduce variation in component placement. Such a guidance system may consist of

automated component placement, laser lights to spot proper drum locations for components, etc. in order to maintain consistency between constructive features in the tire.

Nylon Cap Ply/Edge Bands

48. By whatever means used (jointless nylon band or full belt widths of nylon), the next component to be applied is the nylon cap ply and or nylon edge bands.

49. If using full widths, the material is supplied on a servicing tray on the backside of the second stage building machine drum. If nylon band strips are being used, the applicator head might be behind the operator near the tread servicer. By attaching a strip to the edge of the first belt on the building drum and using multiple drum rotations to tension the nylon as it winds on, the applicator head either steps across to cover the steel belts in increments or moves on a screw so that the spiraling continues, according to the patented techniques being utilized by a particular tire manufacturer.

Tread

50. Once the belts and/or nylon is applied, the last component to be assembled is the tread. Typically, rather than rolling a continuous piece of tread into a fabric or vinyl roll, these are cut to length and stacked in booking trucks and pulled to the second stage machine. The tread may consist of a tread cap on top, a tread base compound, a tread wing which is chemically compatible with the sidewall compound for tread edge adhesion, and an undertread.

51. The operator selects a tread and places it on the service conveyor which may have centering guides attached. The front edge of the tread is attached to the belt or nylon surface on the drum and the drum is rotated a full revolution. The tread splice is made by hand and should be further stitched to maximize green tack.

52. Now, the first stage carcass is fitted over an inflatable drum or chuck which will crown the center of the plies and hold the beads in place. Meanwhile, a transfer ring moves over the second stage drum and spring or pneumatically forced segments extend toward the drum to make contact with the belt/nylon/tread package. Once the segments are in place, the drum collapses, leaving the belt package suspended in the transfer ring segments. The transfer ring then glides over the inflated first stage tire

carcass where the belt package is centered by laser indicators, released, and then dynamically stitched onto the carcass under some pressure.

53. At this point the green tire is completely assembled.. The next step in the process would be to prepare the tire for curing. This step includes inside and/or outside tire paints, which protect and lubricate the innerliner and ply cords from the curing mechanisms as well as reducing the propensity for trapping air during the cure. These paints also assist in covering voids in the tire surface and allowing the air inside and on the surface of the tire to be evacuated more easily. Once the paint is dry, the tire can be cured.

54. The exact orientation of one component's splice in relation to others has been found to be significant to ride disturbances such as vibration and ride harshness. Due to the potential for this to generate complaints by customers, techniques to stagger the number of component splices around the tire are used.

Cure

55. Curing is another area in most tire plants in which at least some of the conditions are standardized for efficiency. In the case of many tire plants the curing factor which is most often standardized is the platen and curing temperature. For example, it would not be unusual for all tires produced in a particular type to be cured at a fixed temperature above 300 degrees, leaving mainly the amount of time as the variable f actor for each specific design.

56. Prior to curing the tire, cure studies are typically conducted in which multiple thermocouples are placed on a green tire. Additional layers of tread stock are added to the surface to allow thermo-coupling for some depth, after this the tire is cured. By sectioning the tire, analysis of the point at which the rubber components are cured without the presence of porosity can be determined. This information will be used to formulate the cure specification for this tire.

57. Due to the high temperature curing that the tire undergoes, ultimately many of these different rubber components are bonded together in such a way that the individual parts meld together. The desired result of curing is not that the rubber components blend to the extent that they lose chemical integrity or identity, but that the rubber to rubber, rubber to fabric, and rubber to steel bonds produce an intact tire system by the degree to which each component becomes melded to the other. The desired result is that no interface

between the components being bonded is weaker than the strength of the individual component, else a failure at that component interface is inevitable, and must be remedied.

58. Once the tire is cured, it will continue through an inspection process which might include X-ray, uniformity measurement, balance check, sidewall undulation measurement, and/or white sidewall buffing. There should be several opportunities before finally being delivered to a warehouse location for the tire to receive visual, tactile, and instrumented inspection.

DESIGNING A PASSENGER OR LIGHT TRUCK STEEL-BELTED RADIAL TIRE

59. Simply stated, any tire's two main functions are to allow ease in rolling and to allow control of the mass of the vehicle on which it is mounted. This control translates into degrees of precision or handling response (ultra-high performance tires being on the upper end of the scale) and the ability to stop (braking) the mass on different surface types in a variety of service and climatic conditions. In the most general of terms, almost every other performance expectation is a desired derivative of those two main functions, including the ability to sustain a certain load and inflation pressure and the ability to continue in service for a reasonable period of time without presenting safety-related modes of failure at the end of serviceable life, such as a tread separation. Consideration of these two primary functions should be incorporated into the tire design process.

60. As a practical matter, tire designers are given some latitude with variations in tread compounding and gauging, some sidewall compounding options and gauging, and usually fewer options for bead apex compounding. Usually a tire designer can expect more freedom to establish the belt widths, angles, and density, adoption of nylon, ply turn up heights and perhaps type of ply cord selected, and the dimensions of the bead apex. Beyond these, such items as innerliner, bead core coating, nylon chafer skim compound, rim protector compound, ply skim compound, belt skim compound, belt wedge compound, nylon skim compound, belt cushion compound, tread wing compound, and undertread compound are virtually never adjusted by individual designers or for specific tire design programs. These type of rubber components (as well as body ply types, nylon types, and to some extent the types of steel used in bead bundles, steel belts, and sidewall inserts) are most often incorporated into every (or nearly every) tire of a given type produced in a given tire plant.

61. In manufacturing a tire, the beads, innerliner, body plies, and sidewalls are typically assembled in the first stage and. the belts, nylon, and tread are assembled over the first stage carcass in the second stage tire building process. This separation of components by stage is also a point of consideration for the design engineer. It is somewhat rare to achieve the total performance requirement in the very first attempt, especially for OE applications. However, the designer must consider that it is somewhat easier to tune a design when the net stiffness of the first stage carcass matches the directional stiffness of the second stage components. For example, if the design requires an improved ride quality, the designer might soften the bead apex, lower the ply turn ups, and thin the sidewall gauges in order to allow the tire's carcass to flex suitably with each large road input.

62. By comparison the second stage components might include a higher belt angle and an increase in tread base gauge. This would allow the tire to crown in the center line, concentrating the contact area to the center of the tire to reduce road contact inputs across the face of the tread/belt package. The tread base typically has a high percentage of natural rubber content and at a lower hardness than the tread cap provides a cushion between the tread cap and the belts, further reducing transmission of road inputs. This technique of "balancing the tire stiffness" creates a baseline of performance by which the designer can then focus on specific performance changes from further tuning changes in the components, compounds, or gauges of future experimental tire specifications within a specific tire development program.

63. By the time that the developmental tire mold has arrived, the tire designer should have discussed with the factory process engineers the dimensions of the initial extrusion dies for the tread, sidewall, and bead apex. For the tread, the block width (area of tread to contact the road surface shoulder to shoulder) of the mold should closely match the block width of the extrusion, the split between tread cap and tread base should be informed, and if possible an initial extrusion trial should have been conducted in order to check the stability of the tread compounds (growth and swell out of the die). Meanwhile the chemical laboratory should have taken samples of the tread compounds, if using an experimental formulation, and analyzed the samples by Rheometric analysis, and dynamic strain or temperature sweeps to understand whether the initial batch is expected to deliver the proper performance, whether

the rubber batch is thoroughly mixed at the Banbury, and some idea of the scorch temperatures for the new compound.

64. Much of this work happens simultaneously so that the tire designer may or may not be informed of every detail, but depends upon the factory process engineer to order the extrusion dies to meet his tire build schedule. Also, for those tire designs which are new sizes for a factory, the factory process engineer might coordinate the ordering of new tire building drums, linkages for the bead winder, and new curing bladders for the incoming mold. The materials members might be coordinating the arrival of new components such as silica, coupling agents, unique polymers, etc. if not already in use.

65. According to the size and type of tire, the tire designer might next consider the type and amount of bead wires used. After selecting the wire to be utilized, the designer should consider the stacking arrangement for the bundle.

66. If the facility only has taped bead constructions available, the decision becomes how many turns and strands the bead will have. All turns will contain an equal number of strands.

67. For those facilities which utilize hexagonal or polygonal shapes and single wound wrapping of bead wires, each row of bead wires can be somewhat unique from the layer above or below. Bead burst testing has indicated that the strongest band in any tire's bead should be the lowest strand. Therefore, consideration should be given to establishing an adequate base count and determining the best bundle type from that point.

68. One consideration in finalizing the bead bundle shape and wire count is the bead apex base width. The uppermost row of bead wires should make it possible to rest the base of the bead apex upon it.

69. Some of the functions of the bead apex are to generate lower sidewall stiffness centrally in the tire (over the bead). Stiffness outside of this, by sidewall compound alone, for example, doesn't generate the same level of handling precision as that directly over the bead bundle, since the bead bundle is the direct contact to the rim which assists in the transfer of steering inputs by the driver. Another function of the bead apex is to separate the carcass ply and its turn up. This in effect

generates a higher degree of carcass tension, which aids in handling maneuvers and also relates to the tire's ability to support the belt and tread package. A third function of the bead apex is to damp vibration inputs before transmission from the road to the rim and into the vehicle's suspension system, floor-pan, and steering column. Once the bead bundle and the bead apex are selected, ply type and gauge, number of plies, and turn up heights are determined.

70. In developing a tire for an OEM, soon the tire designer begins to learn the performance preferences of the vehicle engineers he/she is working with. This knowledge comes to bear especially when determining the side stiffness of the tire (bead apex, ply turn up heights and cord type, and sidewall compound selection) along with the matching wire density, belt angle, and tread compound formulations. This being the case, several different tire sizes for different vehicle fitments of one vehicle maker could have relatively similar tire constructions.

71. OEM considerations aside, the tire designer's task is somewhat more straight-forward when designing for the aftermarket. When establishing designs for sale in tire retail outlets, the designer is tasked with proliferating a range of tires having basically the same features (allowing for size to size deviation in actual performance). As an example, 25 to 30 sizes might be included in the range under one line name. Once the number of sizes is selected, typically by marketing input, several of the sizes might be selected due to the expectation of sales volume they will generate and these might be determined to be the key sizes to receive the largest battery of tests. Other sizes for which marketing has predicted lower volume might not be specifically evaluated in benchmarking comparisons with competition or costly endurance testing until much nearer the time of product launch for the whole line of tires to the market. This isn't to say that the approach mentioned above is the universally accepted methodology for releasing a range of products, but it is one method employed from time to time in the tire industry.

72. I mentioned the designer's task in designing an aftermarket tire is more straight-forward because it is often the case that tire designers establishing a new line of tires will generate, in one form or another, a matrix for the entire line in which the designs for the key sizes are established based upon competitive analysis and perhaps incumbent products with which the designer is familiar. Once the key tire size designs are determined, the designs of the additional sizes are filled into the matrix by factorization;

meaning, the component dimensions are factored up or down from the key sizes (or max and min sizes) based upon the dimensional relation of the specific tire sizes themselves.

73. In this way mold and design drawings can be rationalized (minimized) by overlaying several desired profiles onto one drawing, or utilizing one stamping drawing to demonstrate the placement and text on the sidewall for virtually the whole line of products. This is sometimes termed "embedding" designs.

74. Whichever approach is administered in the design of the tire, the tire designer still maintains the responsibility to ensure the tire meets all testing standards for durability, safety, and regulatory requirement before release to production. The initial production tires should be monitored and retested to confirm previous performance levels are maintained after mass production commences.

75. The next step in determining the initial design of a tire might be to decide on the belt materials and settings. Here again, the belt material is one of those components which can represent a "bottleneck" for a manufacturing site if multiple wire types are introduced. Multiple wire types in the manufacturing environment create complexity in the management of various wire types through creeling (stringing multiple spools of belt wires), calendering (applying belt skim to the creeled wires), belt roll storage, and cutting operations.

76. Design decisions regarding steel belt specifications could include:

g. Belt angle orientation. For markets driving on the right-hand side of the road a standard has been established for which angles should be nearest the tread pattern. Apply these incorrectly and the tire may have a strong tendency to drift sharply off the road to the right-hand shoulder. Applied correctly, the tire should have some corrective tendency to either maintain a straight track or drift slightly against the grade of the road, even when the road has 1% to 3% cant angle. The reverse is true for markets in which vehicles are driven on the left-hand side of the road.

h. Belt width should create an appropriate belt-to-belt step off. Too little difference in the widths of the 1st and 2nd belts and the potential for coincidental endings which generate higher heat on the belt edges due to the flexion occurring near the uncoated ends of the cut belts exists. Too large a difference in belt widths and the endurance of the tire is compromised when the 2nd belt does not cover the full tread width in contact with the road, creating higher loading on the point where the 2nd belt hinges to the 1st belt.

i. Belt angle affects the final cured tread radius. The higher the angle the more "crowning" which will occur in the inflated tire. This is a result typically sought for tires meant to exhibit more ride comfort qualities than handling precision. Noise and rolling resistance are also improved

in this manner as the shoulder drag is reduced when the center has more contact, and with the shoulder pressure reduced there are several frequencies of noise which are reduced in the road noise, belt edge resonance, and pattern noise frequency ranges (between 125 and 2000Hz).

j. Typically belt skim and belt skim gauge for manufacturers who do not utilize unbalanced belts are standardized for a particular tire type. Therefore this element would not usually be decided by the tire designer. Again, the chemists and service compounders would be required to certify that the proper anti-degradants (anti-ozonants and anti-oxidants) were included in the belt skim mix in appropriate content to handle the heat and flexion encountered throughout the lifecycle of the tire. Also, these or additional anti-degradants are required to handle the potential for chemical aging and exposure to climactic elements during the lifecycle of a tire.

k. Also, typically the belt cushion (whether designed as the upper taper of the sidewall extrusion or as an individually extruded wedge of rubber) is predefined by those involved in studying the green tire components based on the belt widths and overall tire height dimension provided by the tire designer. The gauge and width dimension of the belt cushion would be fairly consistent from tire to tire.

l. Belt wedge or belt edge gumstrip is also rarely modified either in chemical composition or dimension.

77. Next, the designer must determine whether the tire should have a nylon band component over the belts due to usage, speed rating, load rating, DOT plunger test, or specific customer requirements for handling or noise control.

78. The nylon used in tire designs has excellent thermal-set properties to allow it to shrink with heating and apply additional resistance to a steel belt system, which ultimately tends toward lifting from the fabric-based carcass beneath it, due to differences in rigidity, steel spring memory, centrifugal forces, mechanical forces generating strain and stresses including compression and tension at various points around the tire and during each loaded revolution of the tire's use.

79. Before the advent of wound nylon strips, called spiral nylon over wrap or bands by some manufacturers, the inclusion of a full belt width of nylon created some challenges for tires. These included morning flatspotting for the first several miles of driving each day and the possibility for the splice to pull apart during the growth encountered when the tire was cured. This required the splice to be overlapped overly wide to ensure good final splice coverage.

80. With nylon strips, the heavy overlap is virtually removed. The result is the same qualities of nylon to sustain the belts, increased high speed performance, increased plunger strength, isolated road noises,

increased handling response, and better management of heat under higher loads-while eliminating the periodic thumping of a heavy nylon splice—though flatspotting can still be an issue.

81. In the absence of a more economical and technically-capable belt bandage, nylon is certainly appropriate for a multitude of design considerations. Nylon hybrids and Kevlars are certainly available; but with limited use and adoption, it is not likely in the near term that these will compare to nylon on a cost per linear foot basis. I've expressed several applications for nylon, yet some manufacturers continue to refuse to adopt nylon due to the cost impact--though I know of no material substitute for it which even comes close to its cost, while providing a safer, alternative design.

82. I have explained some performances about which the tire designer must be aware during the development cycle for a new tire. I have discussed at some length the individual components and the decision process around some of them regarding selection to meet certain test criteria. In doing so, I believe I have mentioned several components which are nearly universally used in tires of a specific category, be it passenger and light truck or others. These might include innerliners, bead wire and skim, ply cord types, ply skim stocks, chafer fabric and skim stocks, belt wire, belt cushion, belt wedges, belt skim stocks, undertread compounds, tread base compounds, rim protector compounds, nylon cap ply fabric and nylon skim stocks.

83. The processing aids for any of these rubber components are oils, tackifiers, peptizers, plasticizers, and softeners. The curatives are accelerators, activators, and sulfur. The adhesion promoters are coupling agents, cobalt salts, brass on wires, and resins on fabrics. The anti-degradants are antioxidants, antiozonants, and paraffin waxes. The reinforcing materials are carbon black, silica, and resins.

84. It is vitally important to realize that when a specific tire product begins to show unacceptable performance, one common link to other products is the use of the universal components within a single factory or set of factories. This overview can help those investigating to isolate root cause effects from others, and hone in on the major factors involved.

85. Another link shared with the suspect tire is the historical performance of chemical ingredients such as the processing aids, curatives, adhesion promoters, anti-degradants, and reinforcing materials being used by a particular tire manufacturer or a specific factory. The way in which

those specific ingredients are handled within the factory, the methods used to load them into the Banbury mixing process, the time given for the proper milling of the rubber stocks, the efforts taken to protect the prepared component from environmental contamination, blooming, or aging- all of these considerations may not be entirely evident from a single tire, yet by understanding the overall methodology involved at the manufacturing site, the tire designer, field service manager, or forensics analyst can better identify all the contributing factors surrounding the lack of performance, whether that is a product integrity issue or achieving a certain level of new tire performance.

86. It has been my experience that the category of passenger tires has transitioned from 13" and 14" tires in the late 1980s to now extend well into the 20" diameter range. The fitments for passenger tires have been extended to pickups and SUV's by the major OEM's of the world. Further the vehicle categories themselves have blurred from the standard categories offered in the 1980s, from sedans to sedan-type multi-use vehicles, from pickup trucks to six-passenger SUV's with payloads of three quarters of a ton.

87. Just as this transition has occurred in vehicle categories, some of the distinctions for the tire types being used have also been blurred creating similarities between passenger (P-metric) and light truck (LT) tire designs. The exceptions are typically in tread pattern depth and type. With the increase in passenger tire overall diameters, the tire building and curing machinery is basically identical between the two segments these days. The tire building personnel (tire builders and curing room operators) may build either type of tire interchangeably, the training they have had in either type of tire production being adequate for the other.

88. Having given thought and consideration to each of the design steps previously mentioned, the tire designer awaits the arrival of the mold, then initiates the first specification upon its delivery. Once the tire specification is produced, the tires might be footprinted for contact shape, sectioned for gauge and component placement confirmation, and evaluated for uniformity. If each of these is deemed to meet the specification, the tire might enter a more thorough testing battery. Otherwise, the process is restarted with perhaps three to five additional variants included in the new specification requests, until an acceptable specification is realized.

<u>REBUTTAL OPINIONS TO THE AFFIDAVIT OF ANTHONY BRINKMAN</u>

89. After reviewing the affidavit of Anthony Brinkman and his assertions as to the "unique" nature of components that comprise a steel-belted radial tire, it is important for me to note that while these components may be unique within a tire they are often universally used among tires in Cooper's production facilities. For example, beads, innerliners, plies, sidewalls, belts, belt skims, and tread compounds get utilized over a variety of types and sizes of tires. This fact alone is an important consideration when forensically evaluating other substantially similar instances when it can be shown that common components suffer failure.

90. Mr. Brinkman attempts to identify only tires sharing the same GTS as similar, when obviously any tires produced with exactly the same internal components are identical rather than similar, except for outward tread pattern and sidewall stamping. His contention that all tires sharing GTS 5237 are similar is only an effort to restrict discovery to a finite specification. The U.S. government rejects this approach in its own forensic investigations as is noted in the Office of Defect Investigations (ODI) report number EA-23 from October 2001 regarding the Firestone Wilderness AT tires. In its summary report NHTSA stated:

> The National Highway Traffic Safety Administration (NHTSA) has made an initial decision that a defect related to motor vehicle safety exists in certain P235/75R15 and P255/70R16 Firestone Wilderness AT tires manufactured before May 1998 that are installed on sport utility vehicles (SUV). This Engineering Analysis Report provides the basis for that decision…
>
> NHTSA's Office of Defects Investigation (ODI) has conducted an extensive investigation to determine whether any other Wilderness tires contain such a defect, and whether they should be recalled as well. The focus of ODI's investigation was on those non-recalled tires that are similar to the recalled tire; i.e. Wilderness AT tires of the size P235/75R15 and P255/70R16 manufactured by Firestone for supply to Ford Motor Company (Ford) as original equipment, as well as replacement tires manufactured to the same specifications ("focus tires"). Most of the focus tires were manufactured at Firestone's Wilson, North Carolina and Joliette Quebec plants, beginning in 1994. In late 1998, Firestone began producing P255/70R16 Wilderness AT tires at Decatur, and in mid-1999, it began producing P235/75R15

> Wilderness AT tires at a new plant in Aiken, South Carolina. Also, fewer than 100,000 P235/75R15 Wilderness AT tires were produced at Oklahoma City, Oklahoma plant…
>
> ODI's investigation included, with respect to both Firestone tires and peer tires, thorough analyses of available data regarding the performance of tires in the field; shearography analysis to evaluate crack initiation and growth patterns and their severity in tires obtained from areas of the country where most of the failures have occurred; and observations, physical measurements, and chemical analyses…
>
> The record of this investigation supports a determination that the focus tires manufactured by Firestone prior to its 1998 modifications to the belt wedge that are installed on SUVs contain a safety-related defect .

It is clear that NHTSA utilized data collected on tires of different sizes, different types, various field performance results from across the country and different Firestone manufacturing facilities in generating their ODI forensic report in the largest recall of tires in U.S. history. Mr. Brinkman's methodology for determining similarity is inconsistent with proper techniques used in the industry, by the government, and that I myself use in determining causations for defective tires.

91. Mr. Brinkman states in paragraph twelve of his affidavit that "tires manufacture under the same brand or model name are not necessarily similar tires." It is my industry experience that designers of tires when tasked with producing new designs for a new line of products basically concentrate their design and testing efforts to a small subset of the total line of tire. For example, the smallest size, largest size and the size expected to be the largest volume size may be concentrated upon in design and testing. While the new line of tires may comprise 50 sizes, designers will focus on a few sizes and make changes by factoring dimensionally to produce designs for all the additional sizes. In this way, the designer is assuming similarity amongst the sizes designed.

92. One past Cooper employee explained this approach to design by relating it to blue jeans. Paraphrasing him, blue jeans may fit young children or adults. The material and technique for production is the same – you only have to factor dimensional changes to produce another size.

93. Forensic analysis of a complex product like a steel-belted radial tire very seldom involves identification of a single root cause to the tire failure. NHTSA observed several failings of the Firestone ATX and Firestone Wilderness AT tires, including inadequate inter-belt gauge of rubber, low peel strength of the belts, the pocket design of the tread pattern and the inadequacy of what it termed "a critical design feature used by tire manufacturers to suppress the initiation and growth of belt edge cracks" called a belt wedge.

94. Identifying causes or contributing factors which cause a tread separation can involve analysis of various components and their capabilities or lack thereof to perform so that the tire which should have been able to endure and be removed safely from service but fails from a lack of fatigue resistance can be properly analyzed. Critical elements of the tires design in regards to a tread separation fatigue failure are typically the permeation resistance and thickness of the innerliner, the stress strain management at the belt edge by dimensions and rubber coverage, the formulation of the belt skim rubber and its capability to resist oxidation, support and insulation of the belt edges by application of a belt wedge (or lack thereof), and the belt wire type and concentration of wires in the critical stress/strain area to name a few. When these components specifically related to tread separations are used to manufacture tires of various sizes and types the field performance and test results of those tires is often very meaningful to understand global performance for those components with any given tire maker. Not only is the data derived from the broader group of tire failures useful for forensic comparison purposes, but the mere fact that Cooper Tire is receiving these test results and field performance reports on an ongoing basis indicates their notice of the same.

95. Mr. Brinkman in paragraphs 25 and 26 discusses certain causations for tread separation from improper maintenance, specifically under-inflation and impact damage. This remains his opinion even though his employer Cooper Tire has provided numerous sworn responses that they have no data from internal testing suggesting that either under-inflation or impacts lead to a tread separation. His further assertion about how one tire performed in one incident versus another is incorrect in my experience and inconsistent with the approach Cooper Tire itself has taken to analyze tire failures over the years.

96. The Exhibit A to Mr. Brinkman's affidavit illustrates seven Cooper Tire failures manufactured prior to the tire in this subject matter in Cooper's various factories and in various tire tread pattern and sidewall designs which should have provided Cooper with notice of the inadequate late life fatigue resistance in their tires leading to tread separations for which safer alternatives of design and manufacturer were available.

Further, Affiant sayeth Naught.

Troy Cottles

TROY COTTLES
STATE OF Alabama
COUNTY OF Limestone

BEFORE ME, the undersigned authority, personally appeared Troy Cottles, who being duly sworn, and is personally known to me or has produced ____________ as identification, deposes and says that he has read and signed the foregoing and that the statements herein are true and correct to the best of his knowledge, information, and belief.

SWORN to and SUBSCRIBED before me this 26 day of October, ~~2008~~ 2012.

Amber Williams

NOTARY PUBLIC, STATE OF AL
Printed Name: Amber Williams
Commission No. ____________
My Commission Expires: Mar. 23, 2016

(Seal)

AMBER WILLIAMS
NOTARY PUBLIC
ALABAMA STATE AT LARGE
MY COMMISSION EXPIRES MAR. 23, 2016

AMBER WILLIAMS
NOTARY
PUBLIC
ALABAMA-STATE AT LARGE

GEORGE MOSS V. COOPER TIRE & RUBBER COMPANY

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

Civil Action No.: 3:11-CV-00689-FLW-LHG

PLAINTIFF'S EXHIBIT E

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
CORPUS CHRISTI DIVISION

GENEVIEVE IDAR, et al., Plaintiffs,	§	CIVIL ACTION
	§	
v.	§	NO. 2:10-CV-00217
	§	
COOPER TIRE AND RUBBER CO., Defendant.	§	JURY TRIAL REQUESTED

PLAINTIFFS' AND INTERVENOR'S PRELIMINARY[1] RESPONSE TO COOPER'S MOTION FOR PARTIAL SUMMARY JUDGMENT ON CLAIMS FOR PUNITIVE DAMAGES (DOC. 74)

TO THE HONORABLE JUDGE OF SAID COURT:

COME NOW the Plaintiffs and Intervenor Amy Farmer (referred to collectively as "the Idar family"), and file Plaintiffs' and Intervenor's Preliminary Response to Cooper's Motion for Partial Summary Judgment on Claims for Punitive Damages (Doc. 74), and in support thereof, would show the Court as follows:

I. Standard for Summary Judgment

1. In a summary judgment motion, the movant bears the burden of identifying an absence of evidence to support the nonmovant's case. *Terrebonne Parish Sch. Bd. v. Mobil Oil Corp.*, 310 F.3d 870, 877 (5th Cir. 2002). The court must consider the evidence bearing on the material issues, viewing the facts and the inferences to be drawn therefrom in the light most favorable to the nonmovant. *Olabisiomotosho v. City of*

[1] The Idar family has characterized this as a "preliminary" response because the Cooper documents referred to in this response were produced less than a week ago, and Cooper was also supposed to produce testimony at the same time, but Cooper heavily redacted parts of that testimony and did not produce other parts of that testimony. As an example of Cooper's heavy redaction, the Idar family's counsel was intending to quote the testimony reflected on the pages of Dennis Powell's December 3, 2009 deposition attached as Exhibit 1, but was precluded from quoting that testimony because of the redactions. Accordingly, the Idar family anticipates supplementing this response.

Houston, 185 F.3d 521, 525 (5th Cir. 1999). The court must not make any credibility determinations or weigh any evidence, but must give credence to evidence favoring the nonmovant and must disregard evidence favorable to the movant that the jury is not required to believe. *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150-51, 120 S.Ct. 2097, 147 L.Ed.2d 105 (2000).

2. Punitive damages may be awarded upon a finding of gross negligence, which is an act or omission

> which when viewed objectively from the standpoint of the actor at the time of its occurrence involves an extreme degree of risk, considering the probability and magnitude of the potential harm to others; and … of which the actor has actual, subjective awareness of the risk involved, but nevertheless proceeds with conscious indifference to the rights, safety, or welfare of others.

Tex. Civ. Prac. & Rem. Code § 41.001(11).

II. Preliminary Evidence Supporting Claims for Punitive Damages

3. The tread peeled off the Cooper tire that caused the fatal crash at the heart of this case:

> Q. Okay. In your opinion, Trooper, would this crash have occurred if there hadn't been a defective tire on the 1995 Ford Aerostar?
> …
> A. I don't believe it would have occurred.
> …
> Q. And I guess what I was trying to get at is, putting down 12 as slick or defective tires was your way of just noting that something happened with the tire that you think contributed to the accident?
> …
> A. That was the reason for the crash, sir. The tire detreaded.
> Q. Now, the tire wasn't slick, was it?
> A. No, sir.

Doc. 75-1 pp. 40, 60-61. For a decade or more before Cooper made the tire that fell apart and caused the fatal crash, Cooper was subjectively and objectively aware of this risk.

4. Beginning at least as early as 1994 and continuing into 1995, there was an increasing trend in which Cooper subjectively identified a problem involving separations between the belts in Cooper's tires. *Ex. 2 [6158].*[2] Cooper identified the necessity for both manufacturing and design changes as part of the long-term plan to go forward. *Id.* During this timeframe, Cooper gained objective confirmation of its subjective understanding about the loss of adhesion between the treads and belts. *Ex. 3 [5096-103]; Ex. 4 [5105-11].*

5. In 1996, Cooper objectively noted a marked increase in liability claims related to tread peels from 1995 and continuing into 1996, and this was especially noticeable in Texas. *Ex. 5 [3980-81].* Later that same year, Cooper subjectively acknowledged a reduction in the quality of its tires and an increase in the liability claims and complaints due to tread separations. *Ex. 6 [3984].* Cooper objectively recognized the need for long-term action to reduce manufacturing problems such as eliminating air entrapment and the need for design changes such as improving its belt rubber just to get Cooper tire back up to Cooper's quality expectations from prior years. *Id. [3985-86].* Cooper's internal documents from this same timeframe confirm that Cooper was subjectively and objectively aware that those tires sold for use in warmer climates were suffering separations at a higher rate. *Ex.7 [3271-72].*

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[2] All documents filed under seal at Cooper's request are referred to by the last four or five digits of their Bates numbers (the preceding digits in these Bates numbers are CCMartinez_Jesus00…).

6. In 1997, objectively, the warranty returns on Cooper's tires were still going up significantly, and in 1998 Cooper was subjectively aware of the need to improve in order to meet customer expectations. *Ex. 8 [4383].* In that same timeframe, Cooper gained further objective confirmation that tire design changes could improve the resistance against tread separations, and that additional improvements in durability against separations were warranted. *Ex. 9 [10567].*

7. In 1998, General Motors provided an objective assessment of Cooper's technical capability, manufacturing capability, and quality philosophy and Cooper was made subjectively aware that its capabilities were "very limited" and "dated significantly" and "lag" behind the tire industry:

> - Research and Development has a few capabilities that are contemporary with the rest of the tire industry; however, overall technical capability is very limited. Significant testing, analysis, and modeling capability would have to be installed to meet current OE tire performance requirements and competitive performance levels.
> - Cooper's manufacturing capability, while contemporary, lags the current OE industry level of automation, control, precision and efficiency.
> - Cooper's quality philosophy is dated significantly, relying on repeated inspections and repair much more heavily than root cause analysis, corrective action and continuous improvement.

Doc. 65-5. General Motors's objective assessment also made Cooper subjectively aware that Cooper "lacks both the tools and the personnel to compete" to produce "tires with the quality and uniformity levels required by General Motors":

> Cooper's declared current position is to be a "fast follower" in the aftermarket. This has resulted in the need for minimal investment in technology in the areas of design, modeling, test and analysis. Therefore they lack both the tools and the personnel to compete in the OE market. Their manufacturing and process technology has been similarly structured, and thus needs similar upgrades to produce original equipment tires with the quality and uniformity levels required by General Motors.

Id. In this same timeframe, Cooper also objectively evaluated its own tires and became subjectively aware that specific design and manufacturing changes could significantly improve Cooper's tires in terms of their ability to resist tread separations. *Ex. 10 [20004].* Moreover, in 1998 and 1999, the warranty returns on Cooper's tires that suffered separations were still continuing to increase. *Ex. 11 [19694].*

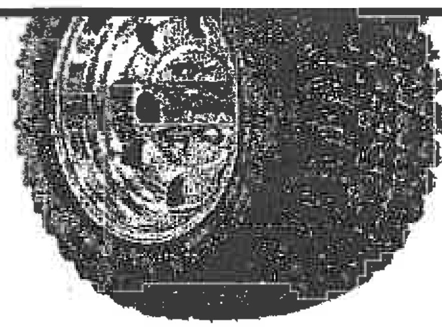
8. In 1999, Cooper was objectively and subjectively aware of the need to identify how Cooper tires were performing in connection with separations in tires sold into different markets with different climates and environments. *Ex. 12 [4015].* In this context, Cooper was subjectively pondering whether its separations were resulting in a poor-quality image, and Cooper was objectively identifying the design criteria that its tires should be designed to wear out before the separate. *Id.* In this context, Cooper formed a Tire Durability Team to try to enhance Cooper's subjective awareness of the growing tread separation problem. *Ex. 13 [4619-23].*

9. In 2000, Cooper's Tire Durability Team continued to meet and objectively evaluate methods for Cooper to change the design and manufacture of its tires to reduce tread separations, but Cooper subjugated this goal to the requirement that Cooper would not incur much cost for such improvements. *Ex. 14 [4069-70].* As a result of these

meetings, Cooper was objectively and subjectively aware of specific tire designs and tire manufacturing practices that other tire manufacturers employ – but which Cooper generally does not employ – to reduce the risk of tread separations, especially in states like Texas. *Ex. 15 [5429-35, 3260-67]; Ex. 16 [2935-38]; Ex. 17 [10610]; Ex.18 [4398-406].* Cooper's internal documents explicitly confirm that Cooper subjectively acknowledged it had a responsibility to improve its tires' resistance against tread separations, but deliberately chose the cheapest change so as to avoid incurring costs. *Ex. 19 [8195-96]; Ex. 20 [4161]; Ex. 21[6873-76]; Ex. 22 [4756-61]; 23 [10545].* During this same timeframe, Cooper also objectively documented an increase in tread separations, mainly in Texas. *Ex. 24 [4394].*

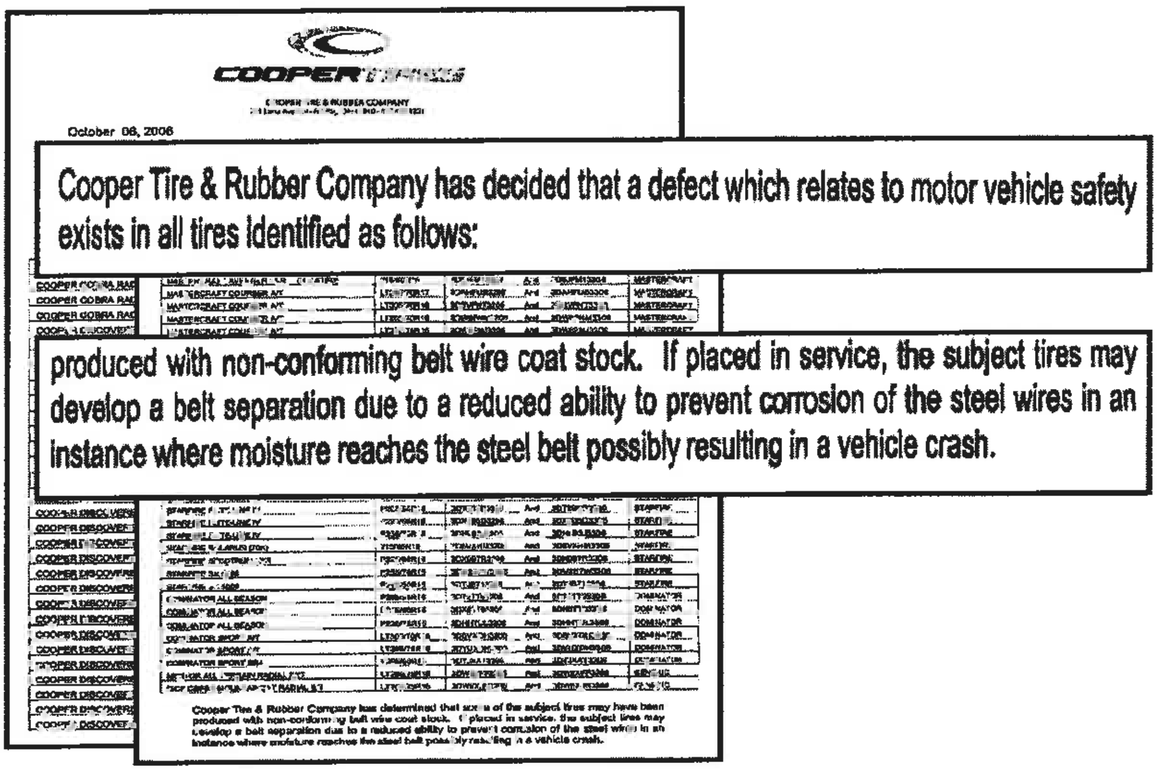
10. In 2001, Cooper tested various alternative designs to mitigate the risk of tread separation. *Ex. 25 [3207-17]; Ex. 26 [4445].* The results for the tire design change which Cooper had adopted (as the cheapest of all the design or manufacturing changes Cooper considered) were mixed. *Ex. 25 [3210-11].* Other alternative designs that Cooper was testing in this timeframe, but which Cooper failed to incorporate in the tire at issue, are marketed overseas by Cooper to "reduce tread separations":

SPECIFICALLY DESIGNED FOR COARSE ROCKY ROAD/TERRAIN
A special addition to the Cooper ST range, the tyre that outperformed 16 other brands of leading all-terrain 4x4 tyres to be rated Australia's No.1 off-road tyre*, the Cooper ST-C has been developed specifically for customers who do most of their driving on coarse rocky road/terrain that requires greater cut and chip resistance.



INCREASED CUT, CHIP AND LUG TEAR RESISTANCE
The Cooper ST-C is made with selective changes to the compound of the S/T that increases cut, chip and lug tear resistance by up to 90%. A nylon overlay increases tread pattern strength and reduces belt separations - the nylon acts as a protective layer making it harder to cut through to the steel belts.

Doc. 65-_. Cooper has publicly acknowledged that there is "a defect which relates to motor vehicle safety" inherent in a "belt separation" because it can foreseeably result in "a vehicle crash":


COOPER

October 06, 2006

Cooper Tire & Rubber Company has decided that a defect which relates to motor vehicle safety exists in all tires identified as follows:

produced with non-conforming belt wire coat stock. If placed in service, the subject tires may develop a belt separation due to a reduced ability to prevent corrosion of the steel wires in an instance where moisture reaches the steel belt possibly resulting in a vehicle crash.

Ex. 26; see also Ex. 27.

III. Conclusion and Prayer

11. Cooper was objectively and subjectively aware that it had an increasing tread separation problem for at least a decade before it made the tire at issue, aware that it had a responsibility to fix that problem, and aware that the problem was a safety concern. For years before it made the tire at issue, Cooper was objectively and subjectively aware that it was failing to incorporate safer alternative tire designs and manufacturing practices that virtually every other tire company was implementing to reduce this safety risk.

During this timeframe in the years shortly before it made the tire at issue, Cooper had objectively identified several safer alternative designs to reduce the risk from its growing tread separation problem which it was subjectively aware of, but Cooper only adopted the cheapest of these safer alternative designs. Before the tire at issue was made, Cooper was objectively and subjectively aware that its attempt to address its growing safety problem in the cheapest manner was having mixed results, but Cooper did not revisit the more effective safer tire designs to the problem, and so these known safer designs were deliberately omitted from the tire at issue. In this context, Cooper's Motion for Partial Summary Judgment on Claims for Punitive Damages (Doc. 74) should be denied.

WHEREFORE, PREMISES CONSIDERED, the Idar family respectfully prays that this Court DENY Cooper's Motion for Partial Summary Judgment on Claims for Punitive Damage.

Respectfully submitted this 21st day of April, 2011.

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ATTORNEY FOR PLAINTIFFS

CERTIFICATE OF SERVICE

I certify that on April 21, 2011, a true and correct copy of the foregoing document was served by ECF on all counsel of record, including:

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/s/ John Blaise Gsanger
John Blaise Gsanger

GEORGE MOSS V. COOPER TIRE & RUBBER COMPANY

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

Civil Action No.: 3:11-CV-00689-FLW-LHG

PLAINTIFF'S EXHIBIT F

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
CORPUS CHRISTI DIVISION

GENEVIEVE IDAR, *et al*,	§	
	§	
Plaintiffs,	§	
VS.	§	CIVIL ACTION NO. C-10-217
	§	
COOPER TIRE & RUBBER CO.,	§	
	§	
Defendant.	§	

ORDER

Pending before the Court are Defendant's Motion for Partial Summary Judgment on Plaintiffs' and Intervenors' Claims for Punitive Damages (D.E. 74), Plaintiffs' and Intervenors' Motion for Partial Summary Judgment on Certain Affirmative Defenses (D.E. 75), and Defendant's Motion for Summary Judgment as to Intervenor Amy Farmer's Negligence Per Se Claim (D.E. 76). For the reasons stated herein, Defendant's Motion for Partial Summary Judgment on Plaintiffs' and Intervenors' Claims for Punitive Damages is DENIED. (D.E. 74). Plaintiffs' and Intervenors' Motion for Partial Summary Judgment on Certain Affirmative Defenses is GRANTED IN PART and DENIED IN PART, as detailed further below. (D.E. 75.) Defendant's Motion for Summary Judgment as to Intervenor Amy Farmer's Negligence Per Se Claim is DENIED. (D.E. 76.)

I. Jurisdiction

The Court has jurisdiction over this action pursuant to 28 U.S.C. § 1332 as the parties are completely diverse and the amount in controversy exceeds the sum of $75,000.

II. Background

A. The Vehicle Accident

This lawsuit arises from a vehicle accident which occurred on July 10, 2009 in Live Oak County, Texas. On the day of the accident, Intervenor Amy Farmer was driving a 1995 Ford Aerostar Van.[1] The vehicle was equipped with seven seats and seven seatbelts. The vehicle was occupied by nine people: the driver, Amy Farmer; front seat passenger, Adeline Farmer; Amy Farmer's daughter, Genevieve Idar; and Genevieve's six minor children.

While traveling northbound on Interstate 37, the van's left rear tire (the "subject tire") suffered a tread and top/belt detachment. Amy Farmer lost control, and the van rolled. All of the vehicle occupants (except for front seat passenger, Adeline Farmer, who is not a participant in this lawsuit) were allegedly injured as a result of the accident. One of the children, eleven-year-old A.I., who was seated in the second row seat of the van, was ejected from the vehicle and died at the scene. (D.E. 1; D.E. 74 at 1-2.)

On July 8, 2010, Plaintiffs Genevieve Idar and her six minor children filed suit against Defendant Cooper Tire & Rubber Company ("Cooper"), the designer and manufacturer of the subject tire. (D.E. 74 at 13.) On February 23, 2011, the driver of the van, Amy Farmer, intervened in the lawsuit seeking damages for her own personal injuries as well as bystander claims allegedly suffered in the accident. (D.E. 51 & 52). On February 18, 2011, the deceased minor A.I.'s father, Steven Allen Idar, intervened in the suit as a wrongful death beneficiary. (D.E. 46; D.E. 47).

According to Plaintiffs' and Intervenors' First Amended Complaints, the cause of the accident was the negligent design and/or manufacture of one of the van's tires, a Cooper Trendsetter P215/75R14, which was made at Cooper's Tupelo, Mississippi plant in 2003. They

[1] The van was owned by Mr. Rawnsley Dibenedetto.

seek a variety of damages, including but not limited to actual damages, mental anguish, loss of consortium, lost earnings, physical impairment, and punitive damages. (D.E. 23 at 27; D.E. 52 at 28.)

Cooper raises several affirmative defenses, including comparative responsibility of Plaintiffs, intervening acts of third parties, compliance with federal regulations governing tires, and nonuse or improper use of restraints. (D.E. 26; D.E. 67.)

B. Summary Judgment Evidence of the Negligent Design and/or Manufacture of the Subject Tire

In support of their claims on summary judgment, Plaintiffs and Intervenors have adduced the following evidence of Cooper's liability based on its designing and manufacturing of the allegedly defective tire:[2]

First, to support their allegation that a defective Cooper tire caused the accident, Plaintiffs point to the deposition of Texas Highway Patrol Trooper Jazmin Garcia, who performed an investigation of the crash site.[3] Trooper Garcia wrote down a "Code 12" in her investigation report, which signifies that "defective or slick tires" may have contributed to the crash. (D.E. 75, Ex. 1 at 54-55, 57-58).[4]

Second, Plaintiffs adduce a variety of documentary evidence to support that, beginning as early as 1994, Cooper had subjective knowledge of problems involving separations between the

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[2] Because much of this evidence is filed under seal, the Court cites only to public documents.
[3] Trooper Garcia is trained in crash investigation. (D.E. 75, Ex. 1 at 7-8.)
[4] When asked what a "Code 12" or "defective or slick tires" means, Trooper Garcia stated:

> A: The tire was — basically the tire was not good for the roadway. It lost its tread as…they were on their way — on the roadway.
>
> Q: So you marked 12 because the tire lost its tread?
>
> A: That was the — yes, sir. That was the factor of — that's the reason the accident happened.

(D.E. 75, Ex 1 at 55.)

belts in Cooper's tires. For example, in January 1998, a team including Tire-Wheel Systems and World Wide Purchasing representatives traveled to Cooper's Findlay, Ohio headquarters and Cooper's Albany, Georgia production facility to perform a potential supplier assessment, advising Cooper beforehand that the team would assess Cooper's Leadership, Technology, Manufacturing, and Quality. (D.E. 65, Ex. 5.) The team's overall assessments were summarized in a February 18, 1998 letter as follows:

> Research and Development has a few capabilities that are contemporary with the rest of the tire industry; however, overall technical capability is very limited. Significant testing, analysis, and modeling capability would have to be installed to meet current OE tire performance requirements and competitive performance levels. Cooper's manufacturing capability, while contemporary, lags the current OE industry level of automation, control, precision and competitive performance levels. Cooper's quality philosophy is dated significantly, relying on repeated inspections and repair much more heavily than root cause analysis, corrective action and continuous improvement.

(Id.)

Third, Plaintiffs adduce a variety of documents to support that tires of similar style and quality to the subject tire were eventually deemed by Cooper to have defective tread separators. For example, on October 6, 2006, Vincent Castellaneta, manager of Consumer Quality Systems, wrote a letter to a Cooper Tires dealer stating that Cooper had decided that "a defect which relates to motor vehicle safety exists" in a number of Cooper tires, including four varieties of "Cooper Trendsetter" tires (though none of precisely the same size as the subject tire, a Cooper Trendsetter P215/75R14). (D.E. 77, Ex. 2.) The letter states: "Cooper Tire & Rubber Company has determined that some of the subject tires may have been produced with non-conforming belt wire coat stock. If placed in service, the subject tires may develop a belt separation due to a reduced ability to prevent corrosion of the steel wires in an instance where moisture reaches the steel belt possibly resulting in a vehicle crash." (Id. at 3.)

Finally, Plaintiffs adduce documentation showing that, around 2001, Cooper tested various alternative designs for its tires to mitigate the risk of tread separation. (D.E. 78, Ex. 25).[5] Alternative designs that Cooper tested in this time frame, but did not incorporate into the subject tire, are apparently marketed overseas by Cooper "to reduce tread separations." For example, according to Cooper marketing material, one such tire employs a "nylon overlay that increases tread pattern strength and reduces belt separations — the nylon acts as a protective layer making it harder to cut through to the steel belts." (D.E. 77 at 6.)

C. The Summary Judgment Motions

Neither party has filed a motion for summary judgment on Plaintiffs' and Intervenors' underlying claims based on Cooper's allegedly negligent design and/or manufacture of the subject tire. Rather, Defendant has filed motions for partial summary judgment as to Plaintiffs' and Intervenors' Claims for Punitive Damages, (D.E. 74), and as to Intervenor Amy Farmer's Negligence Per Se Claim, (D.E. 76). Plaintiffs and Intervenors have filed a motion for partial summary judgment as to Cooper's affirmative defenses based on comparative responsibility and Cooper's affirmative defenses based on alleged compliance with applicable federal safety standards. (D.E. 75).

III. Discussion

A. Summary Judgment

Under Federal Rule of Civil Procedure 56(a), "[a] party may move for summary judgment, identifying each claim or defense—or the part of each claim or defense—on which summary judgment is sought." Fed. R. Civ. P. 56(a). "The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The substantive law identifies

[5] These documents are not cited as they are filed under seal.

which facts are material. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986); Ellison v. Software Spectrum, Inc., 85 F.3d 187, 189 (5th Cir. 1996). A dispute about a material fact is genuine only "if the evidence is such that a reasonable jury could return a verdict for the nonmoving party." Anderson, 477 U.S. at 248; Judwin Props., Inc., v. U.S. Fire Ins. Co., 973 F.2d 432, 435 (5th Cir. 1992).

Pursuant to Fed. R. Civ. P. 56(c)(1), "[a] party asserting that a fact cannot be or is genuinely disputed must support the assertion by: (A) citing to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations (including those made for purposes of the motion only), admissions, interrogatory answers, or other materials; or (B) showing that the materials cited do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact." Fed. R. Civ. P. 56(c)(1).

On summary judgment, "[t]he moving party has the burden of proving there is no genuine issue of material fact and that it is entitled to a judgment as a matter of law." Rivera v. Houston Indep. Sch. Dist., 349 F.3d 244, 246 (5th Cir. 2003); see also Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986). If the moving party meets this burden, "the non-moving party must show that summary judgment is inappropriate by setting forth specific facts showing the existence of a genuine issue concerning every essential component of its case." Rivera, 349 F.3d at 247. The nonmovant's burden "is not satisfied with some metaphysical doubt as to the material facts, by conclusory allegations, by unsubstantiated assertions, or by only a scintilla of evidence." Willis v. Roche Biomedical Labs., Inc., 61 F.3d 313, 315 (5th Cir. 1995); see also Brown v. Houston, 337 F.3d 539, 541 (5th Cir. 2003) (stating that "improbable inferences and unsupported speculation are not sufficient to [avoid] summary judgment"). Summary judgment

is not appropriate unless, viewing the evidence in the light most favorable to the non-moving party, no reasonable jury could return a verdict for that party. Rubinstein v. Adm'rs of the Tulane Educ. Fund, 218 F.3d 392, 399 (5th Cir. 2000).

B. Defendant Cooper Tire's Motion for Partial Summary Judgment on Plaintiffs' and Intervenors' Claims for Punitive Damages

Cooper moves for partial summary judgment on Plaintiffs' and Intervenors' claims for punitive damages, arguing that they cannot meet the standard required to recover punitive damages under Texas law because: (1) there is no evidence of gross negligence, malice or fraud by Cooper, (2) Cooper's reliance on regulatory standards in designing its tires precludes a finding of gross negligence or malice under Texas case law, and (3) Cooper's reliance on mandatory safety standards and regulations creates a rebuttable presumption of non-liability under Tex. Civ. Prac. & Rem. Code § 82.008.

Having reviewed the evidence, the Court finds none of Cooper's arguments warrant a determination on summary judgment that no punitive damages may be awarded following a trial.

1. Compliance with Regulatory Standards Does Not Necessarily Preclude a Finding of Malice or Gross Negligence

In order to obtain punitive damages under Texas law, a plaintiff must prove by clear and convincing evidence that the defendant acted with fraud, malice, or gross negligence. TEX. CIV. PRAC. & REM. CODE § 41.003(a). This burden of proof may not be satisfied by evidence of ordinary negligence, bad faith, and/or a deceptive trade practice. TEX. CIV. PRAC. & REM. CODE § 41.003(b).

Under Texas law, "malice" is defined as a specific intent by the defendant to cause substantial injury to the claimant. TEX. CIV. PRAC. & REM. CODE § 41.001(7). "Gross negligence" is defined as an act or omission: (A) which when viewed objectively from the

standpoint of the actor at the time of its occurrence involves an extreme degree of risk, considering the probability and magnitude of the potential harm to others; and

(B) of which the actor has actual, subjective awareness of the risk involved, but nevertheless proceeds with conscious indifference to the rights, safety or welfare of others. TEX. CIV. PRAC. & REM. CODE § 41.001(11). "Fraud" is defined as any type of fraud other than constructive fraud. See TEX. CIV. PRAC. & REM. CODE § 41.001(6).

Defendant Cooper contends that there are federal regulations governing the production of tires, such as the Federal Motor Vehicle Safety Standards, and that the subject tire was in compliance with these regulations. (D.E. 83 at 2, ¶2.) Cooper accordingly contends that Plaintiffs and Intervenors cannot be awarded punitive damages on any of their claims, asserting: "Texas courts have embraced the notion that compliance with federal safety standards should bar punitive damages." (D.E. 74 at 8) (citing Miles v. Ford Motor Co., 922 S.W.2d 572, 572 (Tex. App. Texarkana 1996); Lorenz v. Celotex Corp., 896 F.2d 148 (5th Cir. 1990); Gideon v. Johns-Manville Sales Corp., 761 F.2d 1129 (5th Cir. Tex. 1985)).

However, none of the cases that Defendant cites holds that compliance with regulatory standards precludes a finding of "malice" or "gross negligence" for purposes of obtaining punitive damages under § 41.003(a).

In Miles v. Ford Motor Co., a negligent design case against Ford Motor Company based on an allegedly defective restraint system, the appellate court found the undisputed evidence at trial showed Ford "went to great lengths to assay the relative risks and benefits of its restraint system and made a decision based on the evidence it had." 922 S.W.2d at 572 at 589. There was "no evidence" of the culpable state of mind required for a showing of negligence or malice. Id. at 589-90. The court stated in a footnote:

> The general rule is that compliance with regulatory standards does not necessarily absolve a manufacturer from ordinary liability for product defects or negligence. See, e.g., Ramirez v. Plough, Inc., 6 Cal. 4th 539, 863 P.2d 167 (Cal. 1993). But most commentators suggest that compliance with a statutory standard should bar liability for punitive damages. See PROSSER AND KEETON ON THE LAW OF TORTS § 36, at 233 (1984), and particularly footnote 41. **We do not decide that question here. We only find that Ford's reliance on regulatory agencies' studies, coupled with the other evidence showing that it made a careful study and decision on the safety of its restraint system, makes the jury findings of gross negligence and malice unsupported by factually sufficient evidence.**

Id. at 589, n. 7 (emphasis added). That is: given the evidence of Ford's lack of malice or gross negligence, *including, but not limited to,* Ford's reliance on regulatory standards, the court held the jury's findings of gross negligence and malice were unsupported by the evidence and that the award of punitive damages was improper. Id. at 590.

In Lorenz v. Celotex Corp., the Fifth Circuit upheld the trial court's jury instruction stating that "compliance with government standards constitutes strong and substantial evidence that a product is not defective." 896 F.2d at 150. In determining that the instruction correctly stated Texas law, the Fifth Circuit stated: "[Plaintiff] has not cited, and the court has not found, any Texas cases establishing a rule that compliance with government standards is less than strong and substantial evidence [that a product is not defective.]" Id. at 151 (citing 59 TEX.JUR.3d Products Liability § 67 (1988)) (reporting that the rule in Texas is that "[evidence] of compliance with government safety standards does constitute strong and substantial evidence that a product is not defective…"); see also Gideon v. Johns-Manville Sales Corp., 761 F.2d 1129, 1144 (5th Cir. Tex. 1985) ("Compliance with such government safety standards [in this case, OSHA's asbestos standards] constitutes strong and substantial evidence that a product is not defective.") (citing Simien v. S.S. Kresge Co., 566 F.2d 551, 557 (5th Cir. 1978).)

Although these cases indicate that compliance with governmental safety standards constitutes "strong and substantial evidence" that a product is not defective, see Gideon, 761

F.2d at 1144, none stands for the proposition that compliance with regulatory standards necessarily exonerates a manufacturer of liability for punitive damages. Indeed, in another Fifth Circuit case involving the liability of a manufacturer for design defects, Dorsey v. Honda Motor Co., Ltd, the Fifth Circuit (albeit applying Florida law) explicitly rejected this argument. 655 F.2d 650, 656 (5th Cir. 1981). Following a jury trial, the district court had determined that compliance with federal safety standards precluded an award of punitive damages against the defendant, Honda, and set aside the jury's punitive damages award. In overturning the court's decision, the Fifth Circuit stated:

> Generally speaking, compliance with regulatory standards may be admissible on the issue of care but does not require a jury to find a defendant's conduct reasonable. See Restatement (Second) of Torts s 288C; W. Prosser, Handbook of the Law of Torts s 36 at 203-04 (4th ed. 1971); Bruce v. Martin-Marietta Corp., 544 F.2d 442, 446 (10th Cir. 1976) (Maryland law); Salmon v. Parke, Davis & Co., 520 F.2d 1359, 1362 (4th Cir. 1975) (North Carolina law); Raymond v. Riegel Textile Corp., 484 F.2d 1025, 1027 (1st Cir. 1973) (New Hampshire law). **Honda offers no persuasive reason why compliance will as a matter of law be merely admissible on the issue of whether the defendant's conduct is reasonable but an absolute defense on the issue of whether its conduct is willful, reckless, or outrageous.** See Silkwood v. Kerr-McGee Corp., 485 F.Supp. 566, 583-86 (W.D.Okl.1979) (compliance with federal standards does not prevent awarding punitive damages if the defendant's conduct is reckless); Gryc v. Dayton-Hudson Corp., 297 N.W.2d 727 (Minn.), cert. denied, 449 U.S. 921, 101 S.Ct. 320, 66 L.Ed.2d 149 (1980).

Id. (emphasis added)

In this case, the standard for punitive damages is "malice," "gross negligence" or "fraud," rather than recklessness or willfulness. § 41.003(a). Nonetheless, the Fifth Circuit's reasoning in Dorsey applies. Cooper has not put forward any reason why compliance with regulatory standards, just because it is evidence of due care, should serve as an absolute defense on the issue of punitive damages. See id. Under the cases cited above, compliance with regulatory standards constitutes "strong and substantial evidence" that a product is not defective, see Lorenz, 896 F.2d at 150; Gideon, 761 F.2d at 1144, but Cooper's compliance with regulatory

standards will not necessarily preclude a finding that Cooper nonetheless acted with gross negligence or malice in designing its tires. See § 41.003(a); Dorsey, 655 F.2d at 656.

Based on the evidence adduced by Plaintiffs, issues of fact remain as to whether, even if Cooper did comply with applicable regulatory standards, it nonetheless acted with malice and/or gross negligence, justifying an award of punitive damages. See TEX. CIV. PRAC. & REM. CODE § 41.003(a). Therefore, Cooper's motion for summary judgment on this ground is denied.

2. Texas Civil Practices & Remedies Code § 82.008

Cooper also argues that punitive damages are not obtainable based upon Texas Civil Practice and Remedies Code § 82.008. § 82.008 provides:

> (a) In a products liability action brought against a product manufacturer ... there is a rebuttable presumption that the product manufacturer ... is not liable for any injury to a claimant caused by some aspect of the ... design of a product if the product manufacturer ... establishes that the product's ... design complied with mandatory safety standards or regulations adopted and promulgated by the federal government, or an agency of the federal government, that were applicable to the product at the time of manufacture and that governed the product risk that allegedly caused harm.
>
> (b) The claimant may rebut the presumption in Subsection (a) by establishing that:
>
> (1) the mandatory federal safety standards or regulations applicable to the product were inadequate to protect the public from unreasonable risks of injury or damage; or
>
> (2) the manufacturer, before or after marketing the product, withheld or misrepresented information or material relevant to the federal government's or agency's determination of adequacy of the safety standards or regulations at issue in the action.

Tex. Civ. Prac. & Rem.Code § 82.008.

As discussed further below, there is substantial evidence that Cooper complied with mandatory safety standards in designing its tires and that these standards governed the risk of tread separation. See id. However, Plaintiffs have met their burden on summary judgment to produce some rebuttal evidence in accordance with § 82.008(b). At trial, Plaintiffs may be able

to show either that "(1) the mandatory federal safety standards or regulations applicable to the [tires] were inadequate to protect the public from unreasonable risks of injury or damage; or (2) [Cooper], before or after marketing the [tires], withheld or misrepresented information or material relevant to the federal government's or agency's determination of adequacy of the safety standards or regulations at issue in the action." § 82.008(b).

Cooper's motion for summary judgment on this ground is also denied.

C. Plaintiffs' and Intervenors' Motion for Partial Summary Judgment on Certain Affirmative Defenses

Plaintiffs and Intervenors move for partial summary judgment on three of Cooper's affirmative defenses: Acts of Plaintiffs and/or Third Parties as Intervening Causes; Alleged Nonuse of Restraints; and Preemption or Statutory Presumption of No Defect. (D.E. 75.) Cooper has responded, contending summary judgment for Plaintiffs on these issues is improper. (D.E. 83.)

1. Cooper's Comparative Responsibility Defenses

The Texas comparative responsibility statute provides that, so long as a claimant's responsibility is not greater than 50 percent, "the Court shall reduce the amount of damages to be recovered by the claimant with respect to a cause of action by a percentage equal to the claimant's percentage of responsibility." TEX. CIV. PRAC. & REM. CODE § 33.012(a); see also § 33.001. Percentage of responsibility is defined as follows:

> That percentage, stated in whole numbers, attributed by the trier of fact to each claimant, each defendant, each settling person, or each responsible third party with respect to causing or contributing to cause in any way, whether by negligent act or omission, by any defective or unreasonably dangerous product, by other conduct or activity violative of the applicable legal standard, or by any combination of the foregoing, the personal injury, property damage, death or other harm for which recovery of damages is sought.

TEX. CIV. PRAC. & REM. CODE § 33.011(4).

Cooper contends that the accident was caused by the negligence of the parties or of a third party over whom Cooper had no control, and that this negligence was a proximate cause of Plaintiffs' and Intervenors' injuries. (D.E. 67 at 24.) Cooper argues that, under § 33.012(a), it should be allowed to submit evidence regarding the comparative responsibility of the parties or of third parties and to reduce its damage accordingly. (D.E. 83.) Plaintiffs and Intervenors seek summary judgment on Cooper's comparative responsibility defenses with respect to the following contributing causes: (1) the actions of Amy Farmer in her operation of the vehicle, and (2) A.I.'s alleged nonuse of a seatbelt or restraining system.

a. Faulty Evasive Action by Driver

Plaintiffs and Intervenors first contend that summary judgment against Cooper on its comparative responsibility defense is proper to the extent that Cooper refers to the actions of Amy Farmer, the driver, in her operation of the vehicle. They state that there is conclusive evidence that the tire caused the accident and "no evidence whatsoever that any of the Plaintiffs (who were all mere passengers in the vehicle) nor any third party had any role in this crash." (D.E. 75 at 3.)

Both of these contentions are inaccurate. Although Trooper Garcia indicated following her investigation that a defective tire was a factor in causing the accident, she also indicated that "faulty evasive action" by the driver of the vehicle may have contributed to the accident. (D.E. 75, Ex. 1 at 54) (Q: [I]t looks like you put factors that contributed as Codes 41 and Code 12, is that correct? A: Correct. Q: And Code 41 stands for faulty evasive action, correct? A: Correct. Q: And what faulty evasive action were you noting here. A: By faulty evasive action, what I mean is when she [the driver Amy Farmer] over corrected.) An issue of fact thus remains as to whether Farmer's driving was a proximate cause of the Plaintiffs' and Intervenors' injuries. This

potentially warrants a reduction in damages due to comparative fault, depending on the jury's findings at trial. See Omega Contracting, Inc. v. Torres, 191 S.W.3d 828, 844 (Tex. App. - Fort Worth, 2006) (driver's faulty evasive action may constitute comparative fault in causing his own injury in a multi vehicle collision, and is properly submitted to jury in the form of a proximate causation question.); see also Block v. Mora, 314 S.W.3d 440, 449 (Tex. App. - Amarillo, 2009) ("If, but for the plaintiff's negligence, the accident would not have occurred then, depending upon the jury's findings, the plaintiff either partially or wholly caused the accident and the injuries attendant thereto.") Therefore, Plaintiffs' and Intervenors' motion for summary judgment is denied with respect to the comparative responsibility of Amy Farmer based on alleged faulty evasive action.

b. Nonuse of Seatbelt or Restraint System

Defendant also seeks to bar or reduce Plaintiff's damages based on the decedent A.I.'s alleged nonuse of a seatbelt or child restraint system. Plaintiff seeks summary judgment that the evidence does not show A.I. was unrestrained and that, in any case, Defendant cannot establish the defense of contributory negligence based on A.I.'s alleged nonuse of restraints. (D.E. 75.)

(1) Issue of Fact Regarding Seatbelt Usage

Plaintiff seeks a summary judgment ruling that A.I. was restrained. However, there is some evidence that A.I. was not wearing a seatbelt or otherwise restrained when the crash occurred. Although the other Idar children and Genevieve Idar all stated in their depositions that A.I. was wearing a seatbelt, (D.E. 75 at 3-4), Trooper Garcia marked A.I. as unbelted in her crash report and gave a citation to the driver Amy Farmer as a result. (D.E. 83, Ex. C (Trooper Garcia depo.) at 35-36.) Trooper Garcia's primary basis for reporting that A.I. was not wearing a seat belt was that A.I. was ejected from the vehicle. (Id. at 36.)

In addition, Defendant's expert Dr. Richard M. Harding states in his affidavit that, based on his examination of, among other things, the Texas Highway Patrol investigation report, photographs, medical records, and the depositions of the parties involved:

> I have concluded that the minor decedent (AI) was, to a reasonable biomechanical probability, unrestrained at the time of the subject event and was, as a consequence, ejected from the vehicle during which process (ejection and ground contact) he was fatally injured. It is my further opinion, to a reasonable medical and biomechanical probability, that had he been retained within the vehicle by means of an available restraint system, he would not have been ejected, would have sustained less severe injuries, and would not have died.

(D.E. 83, Ex. B (Harding affidavit) at 2.)

Based on the evidence described above, the Court finds there remains a genuine issue of material fact as to whether or not A.I. was properly restrained when he was ejected from the vehicle.

(2) Admissibility of Evidence of Seatbelt Nonuse

Plaintiffs contend that evidence of A.I.'s nonuse of a seatbelt is inadmissible at trial to reduce or mitigate damages, if any, awarded to Plaintiffs for their injuries. (D.E. 75 at 5-8) (citing Block, 314 S.W.3d at 447; Carnation Co. V. Wong, 516 S.W.2d 116, 117 (Tex. 1974); Bridgestone-Firestone, Inc. v. Glyn-Jones, 878 S.W.2d 132, 134 (Tex. 1994); Trenado v. Cooper Tire & Rubber Co., No. 4:08-CV-00249, Doc. No. 194 (S.D. Tex. Jan. 26, 2010).) Defendant argues, in contrast, that seatbelt evidence is admissible in order to show or rebut causation and to mitigate damages. (D.E. 83 at 16) (citing Hodges v. Indiana Mills & Manufacturing Inc., 774 F.3d 188 (5th Cir. 2006)).

Evidence of seatbelt nonusage is no longer inadmissible under statute. Prior to its repeal in 2003, Section 545.413(g) of the Texas Transportation Code read: "Use or nonuse of a safety belt is not admissible in a civil trial…" Tex. Transp. Code 545.413(g). Similarly, Section

545.412(d) read, prior to its repeal in 2003: "Use or nonuse of a child passenger safety system is not admissible evidence in a civil trial ..." Tex. Transp. Code 545.412(d).

On the other hand, the repeal of these sections does not indicate that such evidence is now per se admissible. As another federal district court in the Southern District of Texas recently explained in a similar case against Cooper, the legislature repealed Section 545.413(g), but chose not to replace the provision with any other, indicating that "the legislature no longer wished to dictate to the courts that evidence of seatbelt use must be excluded. Therefore, the legislature has now left it to the courts to decide on a case by case basis whether seatbelt use should be admissible at trial." Trenado, No. 4:08-CV-00249, Doc. No. 194 at 33. "In other words, the legislative intent was to change the admissibility of seatbelt usage from a substantive to a procedural issue. Under the Erie doctrine, a federal court sitting in diversity must apply state substantive law and federal procedural law. Here, therefore, federal procedural law governs the admissibility of seat belt usage at trial." Id. at 36.

Accordingly, this court will admit or exclude evidence of seatbelt usage or nonusage at trial according to the Federal Rules of Evidence. See id.

(3) Cooper's Defenses Based On Nonuse of Restraints

a. Comparative Responsibility

As explained above, the Texas comparative responsibility statute provides that "the Court shall reduce the amount of damages to be recovered by the claimant with respect to a cause of action by a percentage equal to the claimant's percentage of responsibility." TEX. CIV. PRAC. & REM. CODE § 33.012(a). Cooper asserts that "the Plaintiffs' and Intervenors' claims for damages should be barred, in whole or in part, under the doctrine of comparative responsibility for the failure to utilize seatbelts and/or other required safety restraint devices." (D.E. 67 at 25.)

Under the current state of Texas law, Cooper's comparative responsibility defense based on A.I.'s alleged nonuse of restraints cannot stand. As explained above, the Texas legislature repealed those provisions of the Texas Transportation Code making admission of nonuse of seatbelts or child restraint systems inadmissible in civil trials, leaving it to the courts to determine whether seatbelt usage or nonusage should be admissible at trial. See Trenado, No. 4:08-CV-00249, Doc. No. 194 at 33. The Texas Supreme Court has held in cases prior to repeal of the Code's provisions that "persons whose negligence did not contribute to an automobile accident should not have the damages awarded to them reduced or mitigated because of their failure to wear available seatbelts." Carnation, 516 S.W.2d at 117; see also Bridgestone-Firestone, Inc., 878 S.W.2d at 134.

Defendant points to the Fifth Circuit's more recent holding in Hodges that the trial court should have allowed the defendant to admit seat belt evidence on the element of causation for a plaintiff's injuries, notwithstanding the (since repealed) provisions of the Transportation Code. 474 F.3d at 202. The court held:

> Subsection (g) [of the Texas Transportation Code] prohibits the introduction of seatbelt evidence to show the plaintiff was contributorily negligent. **On the other hand, in secondary-collision product-liability actions, such evidence may be admissible to show, or, as in this action, rebut, the essential element of causation. Seatbelt evidence was necessary for [defendant] to rebut the essential element of causation-whether its door latch was the proximate cause of [plaintiff's] injuries-and, ultimately, to defeat a crashworthiness claim.** Such evidence is not prohibited by subsection (g). Arguably, this is also demonstrated by the repeal of subsection (g), even though that subsection applies here.

Id. (addressing effect of Tex. Transp. Code 545.413(g) because plaintiff's action was filed prior to repeal of subsection (g)) (emphasis added).

However, the court in Hodges specifically distinguished that case as one involving a secondary-collision product-liability action and a claim for crashworthiness. Id. at 198

("Crashworthiness involves a claim that a defect in the automobile caused the plaintiff's injuries, rather than the underlying accident causing them.") As the Supreme Court of Nevada recently explained, secondary collision or "crashworthiness" cases raise distinct considerations for a court in deciding whether to exclude seatbelt evidence — the defendant must defend the overall design of its safety restraint system against allegations that defects in the system caused the plaintiff's injuries — and this is why the Fifth Circuit chose in Hodges to allow seatbelt evidence in order to rebut the element of causation. Bayerische Motoren Werke Aktiengesellschaft v. Roth, --- P.3d ----, 2011 WL 1436499, *9 (Nev., 2011) (citing Hodges, 474 F.3d at 202).[6]

This case, unlike in Hodges, involves a claim that the underlying accident caused Plaintiffs' injuries, not a claim that a defect in the automobile exacerbated those injuries. 474 F.3d at 198. Cooper manufactured only the allegedly defective tire, not the Ford Aerostar, and it does not need evidence of seatbelt nonuse in order to defend the overall design of the vehicle's restraint system. See id. Accordingly, this Court will follow the holdings of Texas courts addressing the seatbelt defense when the underlying accident, not a failed restraint system, is alleged to have caused the plaintiffs' injuries. See Carnation, 516 S.W.2d at 117.

In Carnation, the plaintiffs failed to wear available seat belts when the automobile they were driving was involved in a collision caused by the negligence of a truck driver. Id. The jury found that plaintiffs' failure to wear available seat belts was negligence and the proximate cause

[6] The court explained:

> It is one thing to exclude seatbelt evidence and argument in a suit alleging that the accident itself—and therefore the injuries flowing from that accident—were caused by a defect in the automobile. It is another thing to exclude such evidence and argument in a crashworthiness case, where evidence that an automobile was equipped with seatbelts is generally admitted to defend the overall design of the safety restraint system and to defend against the claim that the defect in the safety restraint system was the cause-in-fact of the plaintiffs enhanced injuries, for which liability would not otherwise attach. Thus, "in secondary-collision product-liability actions," seatbelt nonuse may necessarily "be admissible to show, or, as in this action, rebut, the essential element of causation." Hodges v. Mack Trucks Inc., 474 F.3d 188, 202 (5th Cir.2006) (emphasis added) (applying Texas law).

Roth, 2011 WL 1436499 at *9 (remaining internal citations omitted).

of their injuries —50% of the injuries in the husband's case and 70% in the wife's case. Id. In upholding the appellate court's reversal of the jury verdict, the Texas Supreme Court stated: "persons whose negligence did not contribute to an automobile accident should not have the damages awarded to them reduced or mitigated because of their failure to wear available seat belts." Id.

Likewise, in this case, the alleged failure of A.I. to wear a seatbelt, or the failure of his mother and Ms. Farmer to strap him in, did not contribute to the automobile accident, and, under current Texas law, they should not have their damages reduced or mitigated because of this failure. See id.; see also Ramirez v. Michelin N. Am., Inc., No. 5:07-CV-01032-OLG, Doc. No. 199 (W.D. Tex. Feb., 18, 2010) ("The current state of the law in Texas is that evidence of a plaintiff's negligence antedating the defendant's wrongful conduct is not admissible to reduce or mitigate the plaintiff's damages.") (citing Pool v. Ford Motor Co., 715 S.W.2d 629, 633 (Tex. 1986) (failure to wear available seat belts); Carnation Co., 516 S.W.2d at 117 (same); Kerby v. Abilene Christian College, 503 S.W.2d 526, 528 (Tex. 1973) (driving with an open deliveryvan door); Haney Elec. Co. v. Hurst, 624 S.W.2d 602, 611 (Tex.Civ.App.-Dallas 1981, writ dism'd) (driving with a can of gasoline in the rear of a station wagon); Block v. Mora, No. 07-08-0092-CV, 2009 WL 35421 *7 (Tex.App.-Amarillo Jan. 7, 2009, pet. dism'd) (driving with an unsecured tire in the bed of a pickup truck); Goldberg v. Dicks, No. 12-02-00053-CV, 2004 WL 253250, at *15-16 (Tex. App.-Tyler February 11, 2004, pet. denied) (riding in an open pickup truck bed).)

Therefore, Plaintiff's motion for summary judgment is granted with respect to Defendant's comparative responsibility defense passed on alleged seatbelt or restraint system nonuse.[7]

b. Mitigation of Damages

Cooper also asserts that A.I.'s alleged nonuse of a restraint system constituted failure to mitigate damages warranting a corresponding reduction in recovery. (D.E. 67 at 26.) However, this defense does not apply in these circumstances. The mitigation of damages doctrine requires an injured party to "exercise reasonable care to minimize its damages if damages can be avoided with only slight expense and reasonable effort." Cotton v. Weatherford Bancshares, Inc., 187 S.W.3d 687, 708 (Tex. App. – Fort Worth 2006, pet. denied.) "[F]ailure of an injured person to care for and treat his injuries as a reasonable prudent person would under the same or similar circumstances" can require a deduction for failure to mitigate damages only in the sense that "damages resulting from such failure are ultimately not proximately caused by the wrongdoer's acts or omissions, but by the injured person's own subsequent negligence, and are thus not recoverable from the wrongdoer." Moulton v. Alamo Ambulance Service, Inc., 414 S.W.2d 444,

[7] To the extent that Cooper raises the defense of "contributory negligence" based on A.I.'s alleged nonuse of a seatbelt, Plaintiffs' and Intervenors' motion for summary judgment is also granted with respect to this defense. "Contributory negligence is negligence with a 'causal connection with the accident that but for the conduct the accident would not have happened,' as opposed to negligence that 'merely increases or adds to the extent of the loss or injury occasioned by another's negligence.' In Texas, a plaintiff may be contributorily negligent and still recover, but not if her percentage of responsibility for her damages is greater than 50%." Solomon v. T & M Contractors, Inc., 2009 WL 5183788, *2 (Tex.App.-Fort Worth, 2009) (citations removed). Thus, contributory negligence would completely bar Plaintiffs' and Intervenors' recovery based on A.I.'s death if it is found that A.I.'s failure to wear a seatbelt (or his mother's or the driver's failures to strap him in) bore greater than 50% of the proportionate responsibility for A.I.'s death. However, there is no causal connection between A.I.'s alleged nonuse of a restraint system and the accident. Stated otherwise, wearing a seatbelt or using a child restraint system may have prevented A.I.'s death, but it did not cause it. See Trenado, No. 4:08-CV-00249, Doc. No. 194 at 41 (citing Torres v. State, 2000 WL 34251147, *5 (Tex. App. – Corpus Christi, 2000, no pet.); see also Bridgestone-Firestone, Inc., 878 S.W.2d at 134 ("a defendant was not permitted to introduce evidence of a plaintiff's failure to wear a seat belt as evidence of contributory negligence") (citing Kerby, 503 S.W.2d 526 (Tex.1973); Carnation, 516 S.W.2d 116 (Tex.1974)); Block, 314 S.W.3d at 448-449 ("That the plaintiff engaged in conduct prior to the accident that somehow increased or added to the extent of his loss or injury does not establish contributory negligence as to the occurrence, i.e., but for his negligence, the accident would not have occurred.") (citing cases).

449 (TEX 1967) (quoting Gulf, C. & S.F. Ry. Co. v. Mannewitz, 70 Tex. 73, 8 S.W. 66, 67 (1888)) (citing Restatement, Torts s 918 (1939); 22 Am.Jur.2d Damages ss 30—32, 38 (1965)).

Here, A.I.'s alleged nonuse of a restraint system did not constitute his or anyone else's "*subsequent* negligence"; rather, A.I. died at the scene of the crash, and there are no allegations he or anyone else failed to treat his injuries to the standard of a reasonable prudent person. See Moulton, 414 S.W.2d at 449; see also Trenado, No. 4:08-CV-00249, Doc. No. 194 at 39 (finding failure of injured party to wear seatbelt did not constitute "subsequent negligence" warranting deduction in recovery under a "failure to mitigate" theory). Accordingly, Plaintiffs' and Intervenors' motion for summary judgment on the affirmative defense of failure to mitigate damages due to alleged nonuse of restraints is granted.

2. Cooper's Defenses Based on Compliance with Safety Standards

Plaintiffs and Intervenors lastly seeks summary judgment on Cooper's affirmative defenses based on compliance with federal safety standards and the statutory presumption of no defect under Tex. Civ. Prac. & Rem. Code § 82.008. The Court has already addressed § 82.008, which provides that:

> In a products liability action brought against a product manufacturer ... there is a rebuttable presumption that the product manufacturer ... is not liable for any injury to a claimant caused by some aspect of the ... design of a product if the product manufacturer ... establishes that the product's ... design complied with mandatory safety standards or regulations adopted and promulgated by the federal government, or an agency of the federal government, that were applicable to the product at the time of manufacture and that governed the product risk that allegedly caused harm.

§82.008(a). To survive on summary judgment, Defendant must provide evidence of three things: (1) the tire's design complied with mandatory federal safety standards; (2) those standards were applicable to the tire at the time of manufacture; and (3) the standards governed the product risk that allegedly caused the harm to Plaintiffs' and Intervenors. Id.

Cooper has succeeded in meeting its burden on summary judgment to show that federal statutes governed the design and manufacture of the subject tire. As set forth in the Affidavit of Anthony Brinkman, a Forensic and Technical Consultant for Cooper, the National Highway Traffic Safety Administration ("NHTSA") instituted testing requirements for passenger tires such as the subject tire in a regulation known as Federal Motor Vehicle Safety Standard 109 ("FMVSS 109"). 49 C.F.R. § 571.109. Mr. Brinkman's Affidavit also suffices on summary judgment to show that Cooper complied with these standards. Mr. Brink explains that, under the regulation itself, no tires not capable of meeting the regulation's standards may be sold in the United States. (D.E. 83, Ex. A at 2-4) (quoting 49 C.F.R. § 571.109 S6) ("No tire that is designed for use on passenger cars and manufactured on or after October 1, 1972, but does not conform to all the requirements of this standard, shall be sold, offered for sale, introduced or delivered for introduction into interstate commerce, or imported into the United States, for any purpose.")

Although Plaintiffs claim that FMVSS 109 does not govern the specific risk of tread separation, (D.E. 75 at 9), the evidence refutes this assertion. 49 C.F.R. § 571.109 covers the risk of tire failure when exposed to a variety of stressful conditions. <u>See</u> <u>id</u>. ("This standard specifies tire dimensions and laboratory test requirements for bead unseating resistance, strength, endurance, and high speed performance; defines tire load ratings; and specifies labeling requirements for passenger car tires.") The risk of tread separation potentially arose from the tire design, which was governed by the federal standard. Thus, the standard "governed the product risk that allegedly caused harm." §82.008(a); <u>see</u> <u>also</u> <u>Trenado</u>, No. 4:08-CV-00249, Doc. No. 194 at 26-27 ("[T]he question is not whether the design of the steel-belted radial tire was governed by FMVSS 109, but rather whether the risk of tire failure arising from that design was

governed by the standards of FMVSS 109"). Defendant has met its summary judgment burden to demonstrate that FMVSS 109 covered the risk at issue in this accident.

The Court therefore denies Plaintiffs' and Intervenors' motion for summary judgment on Defendant's §82.008(a) defense.[8] At trial, Cooper may submit evidence of its compliance under § 82.002(a), and Plaintiffs may try to rebut the presumption of no liability under §82.008(b) by establishing that (1) the mandatory federal safety standards or regulations applicable to the tire were inadequate to protect the public from unreasonable risks of injury or damage; or (2) Cooper, before or after marketing the product, withheld or misrepresented information or material relevant to the federal government's or agency's determination of adequacy of the safety standards or regulations at issue in the action. Tex. Civ. Prac. & Rem.Code § 82.008(b).

D. Defendant's Motion for Summary Judgment as to Intervenor Amy Farmer's Negligence Per Se Claim

Cooper moves for summary judgment as to its defense that the driver, Amy Farmer, was negligent per se with respect to A.I.'s injuries and death and as to all Plaintiffs' and Intervenors' claims relating in any way to A.I.'s injuries and/or death. (D.E. 76.) The basis for Cooper's motion is that Ms. Farmer was in violation of Texas law at the time of the accident because she did not ensure that A.I. was properly restrained in the vehicle she was driving.

As discussed above, there is some evidence that A.I., an eleven year old minor, was not wearing a seatbelt or otherwise restrained in the vehicle; an issue of fact remains as to whether he was properly restrained. It is also uncontroverted that allowing a child under seventeen years of age to ride in a vehicle without requiring the child to be secured by an available safety belt is

[8] However, to the extent that Cooper argues Plaintiffs' claims are preempted, in whole or in part, by federal regulations governing the manufacture and design of tires, including the NHTSA, this defense has no merit. As the court in Trenado explained, federal preemption is not the proper vehicle by which to address the effect of compliance with federal standards on Cooper's liability. Trenado, No. 4:08-CV-00249, Doc. No. 194 at 27-31.

an offense under Texas law. See Tex. Transp. Code § 545.413(b).[9] The record shows that Trooper Garcia of the Texas Highway Patrol issued Ms. Farmer a citation as a result of her alleged failure to restrain A.I. (D.E. 76, Ex. C).[10]

According to Cooper, the Texas Transportation Code, requiring passengers to wear seatbelts and to ensure minor passengers are properly restrained, substitutes for the standard of conduct with regard to supervision of passengers, and that conduct in violation of this standard constitutes negligence per se. (D.E. 76) (citing Missouri Pac. R. Co. v. American Statesman, 552 S.W.2d 99, 103 (Tex. 1977) ("Where the Legislature has declared that a particular act shall not be done, it fixes a standard of reasonable care, and an unexcused violation of the statute constitutes negligence or contributory negligence as a matter of law.")). The Court disagrees.

"The threshold questions in every negligence per se case are whether the plaintiff belongs to the class that the statute was intended to protect and whether the plaintiff's injury is of a type that the statute was designed to prevent." Omega, 191 S.W.3d at 840 (citing Perry v. S.N., 973 S.W.2d 301, 305 (Tex.1998)). Here, A.I., a minor child, clearly belongs to the class the seatbelt laws were designed to protect. His injury and death following an automobile accident is precisely the injury the laws were designed to prevent.

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[9] The Code states:

A person commits an offense if the person:

(1) operates a passenger vehicle that is equipped with safety belts; and

(2) allows a child who is younger than 17 years of age and who is not required to be secured in a child passenger safety seat system under Section 545.412(a) to ride in the vehicle without requiring the child to be secured by a safety belt, provided the child is occupying a seat that is equipped with a safety belt.

§ 545.413(b).

[10] The citation from the Texas Department of Public Safety, which was dismissed following completion of deferred disposition terms, was issued by Trooper Garcia for the following violation: "safety belt, child, required to be secured." (D.E. 76, Ex. C.)

However, this does not end the inquiry, the court then must "determine whether it is appropriate to impose tort liability for violations of the relevant regulations. Id. (citing Perry, 973 S.W.2d at 306). The court considers the following five factors in determining whether a statute represents the appropriate standard of care: "(1) whether the regulations are the sole source of any tort duty from the defendant to the plaintiff or merely supply a standard of conduct for an existing common law duty; (2) whether the regulations put the public on notice by clearly defining the required conduct; (3) whether the regulations would impose liability without fault; (4) whether negligence per se would result in ruinous damages disproportionate to the seriousness of the regulatory violation, particularly if the liability would fall on a broad and wide range of collateral wrongdoers; and (5) **whether the plaintiff's injury is a direct or indirect result of the violation of the regulations**." Id. (citing Perry, 973 S.W.2d at 306) (emphasis added). "These factors are not necessarily exclusive, nor is the issue properly resolved by merely counting how many factors lean each way." Id. (quoting Perry, 973 S.W.2d at 306).

As the Court has already explained in regard to Cooper's comparative responsibility defenses, Texas law simply does not bar a plaintiff's recovery from the manufacturer of an allegedly defective product in these circumstances based solely on the plaintiff's failure to wear a seatbelt. See, e.g., Bridgestone-Firestone, Inc., 878 S.W.2d at 134; Carnation, 516 S.W.2d at 117. Indeed, the Texas Supreme Court has explicitly recognized that failure to wear a seatbelt does not constitute negligence per se barring a plaintiff's recovery. Bridgestone-Firestone, Inc., 878 S.W.2d at 134 ("By enacting a statute mandating the use of a seat belt, however, the legislature could have overruled our decision in Kerby and Carnation and established a basis for a negligence per se defense whenever a plaintiff failed to wear a seat belt. Instead, the legislature added subsection (j) [since repealed] to ratify Carnation 's holding.) (citing Pool v. Ford Motor

Co., 715 S.W.2d 629, 633 (Tex.1986).) As explained above, the repeal in 2003 of Sections 545.413(g) and 545.12(d) of the Texas Transportation Code does not indicate that the legislature intended to make evidence of seatbelt use or nonuse categorically admissible in civil trials; and it certainly does not indicate that the legislature intended to establish a negligence per se defense whenever a plaintiff fails to wear a seatbelt or whenever a driver fails to strap in a minor passenger. See Trenado, No. 4:08-CV-00249, Doc. No. 194 at 33.

Accordingly, the Court denies Defendant's motion for summary judgment as to Amy Farmer's negligence per se.

IV. Conclusion

For the reasons stated above, Defendant's Motion for Partial Summary Judgment on Plaintiffs' and Intervenors' Claims for Punitive Damages is DENIED. (D.E. 74). Plaintiffs' and Intervenors' Motion for Partial Summary Judgment on Certain Affirmative Defenses is GRANTED IN PART and DENIED IN PART. (D.E. 75.) The motion is granted with respect to Cooper's affirmative defenses based on alleged seatbelt nonuse and federal preemption. The motion is denied with respect to Cooper's affirmative defenses based on comparative fault due to faulty evasive action by the driver and based on statutory presumption of no defect under Tex. Civ. Prac. & Rem. Code § 82.008. Defendant's Motion for Summary Judgment as to Intervenor Amy Farmer's Negligence Per Se Claim is DENIED. (D.E. 76.)

SIGNED and ORDERED this 6th day of June, 2011.

Janis Graham Jack

Janis Graham Jack
United States District Judge

GEORGE MOSS V. COOPER TIRE & RUBBER COMPANY

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

Civil Action No.: 3:11-CV-00689-FLW-LHG

PLAINTIFF'S EXHIBIT G

0001

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF KENTUCKY
LEXINGTON DIVISION

KIM LOGAN, AS LEGAL GUARDIAN FOR :
JAMES O. GUMM, JR., :
PLAINTIFF, :
AND :
KENTUCKY CABINET FOR HEATH AND : CASE NO.
FAMILY SERVICES, : 5:10-CV-00003-KSF
AND :
UNIVERSITY OF KENTUCKY AND KENTUCKY,:
MEDICAL SERVICES FOUNDATION INC., :
INTERVENING PLAINTIFFS, :
:
- VS - :
:
COOPER TIRE & RUBBER COMPANY, :
DEFENDANT. :
- - -

REDACTED

C O N F I D E N T I A L

VIDEO DEPOSITION OF
BRUCE CURRIE

A WITNESS OF LAWFUL AGE, HAVING PERSONALLY APPEARED BEFORE ME, SHELLEY DAY, A PROFESSIONAL REPORTER AND NOTARY PUBLIC IN AND FOR THE STATE OF OHIO, ON THIS 7TH DAY OF JUNE, 2011, BEGINNING AT 9:00 A.M., AT THE FINDLAY INN AND CONFERENCE CENTER, FINDLAY, OHIO, FIRST DULY CAUTIONED AND SWORN, GAVE ORAL TESTIMONY IN THE ABOVE-SAID CAUSE PURSUANT TO NOTICE AND/OR AGREEMENT AND STIPULATIONS OF COUNSEL FOR THE RESPECTIVE PARTIES AS HEREINAFTER SET FORTH.

SHELLEY DAY
PROFESSIONAL COURT REPORTER
2111 STONECLIFF DRIVE ~ FINDLAY, OH 45840
(419) 424-3755

0002

A P P E A R A N C E S

VIDEOGRAPHER: CARL CAYWOOD
COURT REPORTER: SHELLEY DAY

ON BEHALF OF THE PLAINTIFFS:
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KASTER & LYNCH
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FARRAR & BALL
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ON BEHALF OF DEFENDANT COOPER TIRE & RUBBER CO.:
THOMAS WARBURTON, ESQ.
BRADLEY, ARANT, BOULT & CUMMINGS
ONE FEDERAL PLACE
1819 FIFTH AVENUE NORTH
BIRMINGHAM, AL 35203-2119

- - -

0003

S T I P U L A T I O N S

- - -

IT IS STIPULATED AND AGREED BY AND AMONG COUNSEL FOR THE RESPECTIVE PARTIES HERETO THAT THE DEPOSITION OF BRUCE CURRIE MAY BE TAKEN AT THIS TIME, BY AGREEMENT AND/OR NOTICE OF COUNSEL, IN STENOTYPE BY THE NOTARY, WHOSE NOTES MAY THEREAFTER BE TRANSCRIBED OUT OF THE PRESENCE OF SAID WITNESS, AND THAT THE WITNESS SHALL READ AND SIGN THIS DEPOSITION.

IT IS FURTHER STIPULATED THAT THE OFFICIAL CAPACITY, CHARACTER AND QUALIFICATIONS OF THE NOTARY ARE ADMITTED.

- - -

0004

I N D E X

WITNESS:	PAGE
BRUCE CURRIE	
DIRECT EXAMINATION BY MR. KASTER	5
CROSS-EXAMINATION BY MR. WARBURTON	195
REDIRECT EXAM BY MR. KASTER	269
RECROSS-EXAM BY MR. WARBURTON	306
FURTHER REDIRECT EXAM BY MR. KASTER	309

PLAINTIFFS' EXHIBITS	MARKED
EXHIBIT 1	5
EXHIBIT 2	6
EXHIBIT 3	14
EXHIBIT 4	43
EXHIBIT 5	45
EXHIBIT 6	50
EXHIBIT 7	62
EXHIBIT 8	63
EXHIBIT 9	67
EXHIBIT 10	76
EXHIBIT 11	81
EXHIBIT 12	90
EXHIBIT 13	92
EXHIBIT 14	107
EXHIBIT 15	109
EXHIBIT 16	149
EXHIBIT 17	152
EXHIBIT 18	147
EXHIBIT 19	189
EXHIBIT 28	296
EXHIBIT 29	299
EXHIBIT 30	300

DEFENDANT'S EXHIBITS	MARKED
EXHIBIT 20	247
EXHIBIT 21	254
EXHIBIT 22	260
EXHIBIT 23	262
EXHIBIT 24	263
EXHIBIT 25	264
EXHIBIT 26	265
EXHIBIT 27	265

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0005

VIDEO DEPOSITION OF
BRUCE CURRIE
HAVING BEEN FIRST DULY SWORN, TESTIFIED AS FOLLOWS:

DIRECT EXAMINATION
BY MR. KASTER:
Q WOULD YOU STATE YOUR FULL NAME PLEASE, SIR.
A MY NAME IS BRUCE ALAN CURRIE.
Q AND YOUR PRESENT ADDRESS, SIR.
A IT'S 15638 U.S. 224 EAST, FINDLAY, OHIO.
Q MR. CURRIE, WHAT DID YOU DO TO PREPARE FOR TODAY'S DEPOSITION?
A NOT REALLY ANYTHING. THE ONLY THING I HAVE IS THE SUBPOENA FOR THE DEPOSITION AND THEN THE PLAINTIFFS' THIRD AMENDED NOTICE OF DEPOSITION.
Q AND YOU'RE HERE PURSUANT TO THE SUBPOENA THAT WE HAD SERVED ON YOU?
A YES.
(PLAINTIFFS' EXHIBIT 1 MARKED FOR IDENTIFICATION)
Q CAN I SEE THE DEPOSITION NOTICE YOU HAVE, SIR? LET'S GO AHEAD AND JUST MARK THAT AS EXHIBIT ONE.
MR. CURRIE, GIVE ME A BRIEF SUMMARY OF YOUR EDUCATIONAL BACKGROUND IF YOU WOULD, SIR.
A FIRST OF ALL, I HAVE A BACHELOR'S OF SCIENCE DEGREE IN CHEMICAL ENGINEERING FROM THE UNIVERSITY OF

0006

CINCINNATI AND THAT'S JUNE OF 1971. I HAVE A MASTER'S OF BUSINESS ADMINSTRATION FROM EAST TEXAS STATE UNIVERSITY AND THAT'S DECEMBER 1976, AND I HAVE A MASTER'S OF SCIENCE IN ENGINEERING FROM G.M.I. AND THAT IS SEPTEMBER 1995.
(PLAINTIFFS' EXHIBIT 2 MARKED FOR IDENTIFICATION)
Q AND LET ME HAND YOU WHAT I AM GOING TO MARK AS THE NEXT EXHIBIT AND ASK YOU IF THIS IS AN UPDATED COPY OF YOUR CURRICULUM VITAE, OR IF IT APPEARS TO BE.
A I THINK I MAY HAVE A MORE RECENT ONE. I AM NOT SURE THAT THERE'S MUCH DIFFERENCE IN IT THOUGH.
Q CAN YOU TELL ME WHAT DIFFERENCE THERE MIGHT BE JUST GENERALLY SPEAKING, MR. CURRIE?
A ONE THING I ADDED WAS THE PAPER THAT I GAVE LAST SUMMER.
Q THAT'S GOING TO BE THE EXHIBIT THAT'S COMING UP, IS THAT THE I.T.C. PAPER?
A YES. I ADDED THAT. I MAY HAVE MADE A FEW CHANGES TO THE FIRST PARAGRAPH. OTHER THAN THAT IT SHOULD BE THE SAME.
Q ONE OF THE REASONS THAT I WENT AHEAD AND MARKED THAT AS AN EXHIBIT IS I KNOW THE LAST TIME I DEPOSED YOU SOME OF THE DATES FROM YOUR LONG CAREER AT COOPER ARE A LITTLE BIT HARD TO REMEMBER AND I THOUGHT THIS MIGHT ASSIST YOU WHEN I GO THROUGH YOUR HISTORY

0007

AND THAT'S WHY I GAVE IT TO YOU. I WASN'T AS CONCERNED ABOUT BEING UP-TO-DATE AS I WAS AN AID TO YOU.
A OKAY.
Q DO YOU UNDERSTAND?
A YES, THAT'S FINE.
Q BUT I DO APPRECIATE YOU GIVING ME THE UPDATE.
Q NOW LET ME GO TO YOUR WORK EXPERIENCE AT COOPER TIRE. CAN YOU TELL ME, AND YOU DON'T HAVE TO TELL ME EVERYTHING THAT'S IN THE C.V. BUT KIND OF SUMMARIZE FOR US YOUR WORK HISTORY AT COOPER TIRE, WHEN YOU STARTED, WHAT YOU DID, AND WHEN YOU LEFT.
A OKAY. I WILL REFER TO MY C.V. BECAUSE I DON'T REMEMBER ALL THE DATES. I BASICALLY STARTED AT COOPER TIRE IN SEPTEMBER 18, 1967 WHEN I WAS A CO-OP STUDENT AT THE UNIVERSITY OF CINCINNATI, CO-OP'D WITH COOPER. IN JUNE OF 1971 I WENT FULL-TIME AT COOPER.
AT THAT TIME I WAS A PROJECT ENGINEER. WE WORKED ON VARIOUS PROJECTS. ONE WAS CHECK THE ALIGNMENT SYSTEM AND A FEW OTHER THINGS.
IN MARCH OF 1972 I BECAME A RADIAL TIRE DEVELOPMENT ENGINEER. FROM THAT POINT TO 1974, JANUARY, THAT'S WHEN WE DEVELOPED OUR ORIGINAL RADIAL PASSENGER TIRE AT COOPER AND I WAS THE TIRE ENGINEER THAT WORKED ON THAT PROJECT.
JANUARY OF 1974 I TRANSFERRED TO TEXARKANA.

0008

THAT'S WHERE RADIAL TIRE PRODUCTION BEGAN. AND I WAS A RADIAL TIRE PRODUCTION ENGINEER FROM JANUARY 1974 TO OCTOBER 1974. AND THEN IN OCTOBER 1974 I BECAME RADIAL TECHNICAL MANAGER IN TEXARKANA OVER THE RADIAL AREA, AND WE CONTINUED OUR PRODUCTION WORK ON RADIAL TIRES BASICALLY. I WAS RESPONSIBLE FOR ALL THE ASPECTS, THE TECHNICAL ASPECTS OF PRODUCING THE TIRES.
THAT WAS UNTIL NOVEMBER OF 1976, AND THEN IN NOVEMBER OF 1976 THE TEXARKANA PLANT WAS DIVIDED INTO RADIAL TIRES AND BIAS TIRES SO IN NOVEMBER OF 1976 I WENT TO THE BIAS SIDE AND WAS TIRE CONSTRUCTION MANAGER IS WHAT THEY CALL THAT AND THE TIRE CONSTRUCTION MANAGER WENT TO THE RADIAL SIDE, WE SWAPPED JOBS.
Q LET ME INTERRUPT YOU IF I COULD, MR. CURRY. WHEN YOU MADE THE SWITCH TO BIAS TIRES WOULD THAT HAVE INCLUDED LIGHT TRUCK TIRES AS WELL AS PASSENGER TIRES?
A YES. IT WAS MEDIUM TRUCK ALSO.
Q OKAY. I'M SORRY TO INTERRUPT YOU. GO AHEAD PLEASE.
A AND THAT WAS UNTIL DECEMBER OF 1977. AT THAT POINT I CAME BACK TO FINDLAY. IN JANUARY OF 1978 I WAS SUPERVISOR IN RADIAL PASSENGER TIRE DEVELOPMENT UNTIL OCTOBER OF 1979. AND IN OCTOBER OF 1979 I BECAME MANAGER OF RADIAL TRUCK TIRE DEVELOPMENT.
Q CAN I INTERRUPT YOU AGAIN FOR JUST A MOMENT?

0025

EITHER DESIGN OR MANUFACTURE, WHAT HAPPENS NEXT IN THE SYSTEM?
MR. WARBURTON: OBJECT TO FORM, FOUNDATION, SPECULATION.
A WELL, BASICALLY YOU WRITE A REPORT SAYING THIS IS WHAT WE FOUND AND WE THINK THIS IS THE PROBLEM AND THEN RECOMMENDATIONS ARE MADE TO MAKE CHANGES IN PRODUCTION TO CORRECT THE PROBLEM.
Q IS THE DATA THAT IS ACCUMULATED FROM THE ADJUSTMENT SEPARATION RETURNS DISSEMINATED TO THE PLANTS WHERE THE TIRES ARE MANUFACTURED BY COOPER ON A REGULAR BASIS?
A YES.
Q AND WHY?
MR. WARBURTON: OBJECT TO THE FORM, FOUNDATION.
A WELL, IN A WAY I GUESS THERE'S A LITTLE COMPETITION BETWEEN PLANTS, YOU KNOW, THEY WANT TO BE THE BEST PLANT, SO THEY WANT TO KNOW WHAT IS COMING BACK. IT'S ALSO GOOD TO LET THE PLANTS KNOW WHAT THAT CONDITION IS SO THEY CAN LOOK AT IT AND MAYBE THEY CAN MAKE CORRECTIONS IN THE PLANT FOR IT.
ONE THING I KNOW AT LEAST IN COOPER'S CASE IS THAT THERE'S PLANTS IN DIFFERENT PARTS OF THE COUNTRY AND TIRES IN THOSE PLANTS GO TO DIFFERENT PARTS OF THE

0026

COUNTRY SO IT'S DIFFICULT TO COMPARE DIRECTLY PLANT TO PLANT BUT, AND THEY MAKE DIFFERENT SIZE TIRES TOO, BUT THAT'S PRETTY MUCH WHY IT'S DONE.
Q DOES ANYONE OTHER THAN THE PLANT MANAGEMENT FOLKS RECEIVE THESE PERIODIC ADJUSTMENT REPORTS?
MR. WARBURTON: OBJECT TO THE FORM, FOUNDATION.
A WHEN I WAS IN THE FACTORY, I MEAN, THE TECHNICAL MANAGERS RECEIVED THEM, TECHNICAL DEPARTMENTS.
Q AND OTHER THAN THE TECHNICAL PEOPLE IN THE PLANTS, DO ANYBODY ELSE IN MANAGEMENT AT COOPER LOOK AT THESE PERIODIC ADJUSTMENT REPORTS THAT WE'RE TALKING ABOUT?
MR. WARBURTON: OBJECT TO THE FORM, FOUNDATION.
A WELL, THE PLANT MANAGER SEES THEM AND I'M NOT SURE, PROBABLY THE PRODUCTION MANAGER IN THE PLANTS.
Q OKAY. WELL, WHAT ABOUT PEOPLE LIKE WHEN HE WAS PRESIDENT DICK STEPHENS WOULD HE SEE THIS TYPE OF DATA?
MR. WARBURTON: OBJECT TO THE FORM, FIRSTHAND KNOWLEDGE.
A I BELIEVE HE PROBABLY WOULD, YOU KNOW, BEING PRESIDENT I DON'T KNOW THAT HE WOULD GET ALL THE

0027

DETAILS BUT HE WOULD AT LEAST SEE WHAT THE SUMMARIES ARE FOR ALL THE PLANTS.
Q IS THE ADJUSTMENT SYSTEM THE BEST MECHANISM FOR PROVIDING COOPER WITH EARLY WARNINGS OF ANY TYPES OF PROBLEMS WITH TREAD SEPARATED TIRES?
MR. WARBURTON: OBJECT TO THE FORM, ARGUMENT.
A WELL, MY EXPERIENCE IS THAT YOU CAN DO LOTS OF TESTING AND YOU CAN DO A LOT OF DEVELOPMENT WORK AND, YOU KNOW, YOU CAN DO THE BEST JOB YOU CAN TO TAKE CARE OF PROBLEMS BUT THE REAL ANSWER TO HOW THE TIRE RUNS IS IN THE FIELD SO, YOU KNOW, IT'S IMPORTANT, THE ADJUSTMENT INFORMATION IS IMPORTANT.
Q OKAY. LET ME ASK IT A DIFFERENT WAY.
WAS THE ADJUSTMENT DATA THAT WAS REPORTED BACK TO THE COMPANY CONSIDERED IMPORTANT TO COOPER TIRE AS FAR AS ANALYSIS OF THE PERFORMANCE OF THE PRODUCT IN THE FIELD?
MR. WARBURTON: OBJECT TO THE FORM, ANSWER ON BEHALF OF THE ENTITY.
A YES.
Q WAS THAT THE BEST WAY TO DETERMINE THE PERFORMANCE OF THE TIRE IN THE FIELD? AND I'M TALKING ABOUT ANALYSIS OF ADJUSTMENT RETURNS FOR SEPARATIONS.
MR. WARBURTON: OBJECT TO THE

0028

FORM,.
A YES, I WOULD SAY SO.
Q NOW, LET ME SWITCH TO CLAIMS FOR A MOMENT.
TELL ME THE DIFFERENCE BETWEEN THE ADJUSTMENT TIRE THAT WE'VE JUST DESCRIBED AND A CLAIMS TIRE.
A OKAY. AN ADJUSTMENT TIRE BASICALLY IS RETURNED AND CREDIT'S GIVEN FOR THE TIRE. A CLAIMS TIRE IS A CASE WHERE THE CUSTOMER HAS SOME MONETARY ISSUE INVOLVED. IT MAY HAVE DONE DAMAGE TO THE VEHICLE OR SOMETHING ELSE HAPPENED AND THEY ACTUALLY WANT MORE THAN WHAT THEY WOULD GET FROM THE TIRE CREDIT, SO IT'S A MONETARY CLAIM BASICALLY BUT NO NECESSARILY LEGAL ASPECT AND GENERALLY THERE'S NO INJURIES INVOLVED IN THE CLAIMS.
Q LET'S TAKE A TYPICAL SITUATION WITH A CLAIMS TIRE. SAY AN INDIVIDUAL HAS A TREAD BELT DETACHMENT OR SEPARATION AND THE FLAP OF THE TIRE BEATS UP ON THE SIDE OF THEIR VEHICLE AND CAUSES DAMAGE AND THEN THEY RETURN THE TIRE TO COOPER'S CLAIMS CENTER, IS THAT CORRECT, AM I SAYING THAT RIGHT?
MR. WARBURTON: OBJECT TO THE FORM, HYPOTHETICAL.
A TO BE HONEST I AM NOT EXACTLY SURE HOW THEY WOULD GET THERE. I THINK SOME OF THEM MAY COME THROUGH THE ADJUSTMENT SYSTEM, MAYBE THEY SEND THEM THROUGH THE

0029

ADJUSTMENT CENTERS, THEY MAY GIVE THEM TO THE DEALERS AND THE DEALERS MAY SEND THEM IN AS CLAIMS.
Q OKAY. AND THEY WOULD HAVE SEVERAL ROUTES THEY COULD TAKE WHEN THEY COME TO THE CLAIMS CENTER?
MR. WARBURTON: OBJECT TO THE FORM AND FOUNDATION.
A YES.
Q WHAT HAPPENS WHEN THEY GET TO THE CLAIMS CENTER?
A WELL, WHAT HAPPENED WITH US IS THEY'D HAVE A CLAIM AND THEY'D ASK FOR US TO LOOK AT THE CLAIM TIRE AND I'D DO A FORENSIC EXAM OF THE ITEMS THEY HAD FOR THAT CLAIM AND THEN TALK TO THE CLAIMS PERSON AND TELL HIM WHAT MY OPINION WAS, WHAT I THOUGHT.
Q AND THEN A DECISION WOULD BE MADE WHETHER TO REIMBURSE THE PERSON IN WHOLE OR IN PART BASED ON THEIR CLAIM FOR DAMAGES TO THEIR VEHICLE OR SOME OTHER MINOR –
MR. WARBURTON: FORM OBJECTION.
A YES.
Q – PROBLEM?
A YES.
Q AND ARE YOU AWARE THAT THE CLAIMS DATA WAS ALSO RECORDED ON A COMPUTER SYSTEM?
MR. WARBURTON: OBJECT TO THE

0030

FORM.
A I DON'T KNOW HOW THE CLAIMS DATA WAS RECORDED TO BE HONEST. IT WASN'T, IT WASN'T PART OF THE ADJUSTMENT SYSTEM.
Q YEAH, I UNDERSTAND THAT. IT WAS A SEPARATE BECAUSE IT WAS A PROPERTY DAMAGE CLAIM?
A RIGHT.
MR. WARBURTON: OBJECT TO THE FORM, OBJECT TO THE READING, COUNSEL'S TESTIFYING.
Q BUT I GUESS MY QUESTION REALLY IS IS THAT NOT ANOTHER WAY THAT COOPER WOULD HAVE BEEN ADVISED POTENTIALLY OF TREAD SEPARATION PROBLEMS WITH THEIR PRODUCT TO THE CLAIMS CENTER WITH THE CLAIMS TIRES?
MR. WARBURTON: OBJECT TO THE FORM, FOUNDATION.
A YES, COULD BE.
Q YOU'RE JUST NOT AWARE OF WHETHER THAT WAS PUT ON A COMPUTER AND ANALYZED?
MR. WARBURTON: OBJECT TO FORM.
A NO. AS FAR AS I KNOW, THE CLAIMS INFORMATION WAS KEPT BY THE LEGAL DEPARTMENT OR SOME OTHER GROUP BUT AS FAR AS I KNOW I NEVER SAW ANY REPORTS ON CLAIM TIRES.
Q IN ADDITION TO A CATEGORY OF SEPARATIONS IN WHICH IT WOULD BE OBVIOUS THE TREAD IS OFF, WE TALKED

0031

ABOUT THAT, WERE THERE OTHER CATEGORIES FOR ADJUSTED TIRES THAT WOULD GIVE YOU AN INDICATION OF POTENTIAL A TREAD SEPARATION PROBLEM WHERE THE TREAD HAD NOT YET DETACHED?
MR. WARBURTON: OBJECT TO THE FORM, OPINION TESTIMONY, UNDISCLOSED EXPERT.
A SOME OF THE OTHER CATEGORIES YOU'D LOOK AT IS TIRE UNIFORMITY OR RIDE DISTURBANCE, OUT OF BALANCE. SEPARATIONS CAN CAUSE SITUATIONS WHERE YOU HAVE SOME RIDE DISTURBANCE FROM THE TIRES BEFORE THEY ACTUALLY, THE TREAD COMES OFF.
Q WHAT ABOUT ACCELERATED LOCALIZED WEAR, IS THAT ALSO A CATEGORY FOR ADJUSTMENT OF TIRES?
MR. WARBURTON: SAME OBJECTION.
A I BELIEVE SO.
Q LET ME ASK YOU A QUESTION ABOUT LOCALIZED ACCELERATED WEAR.
ON THE TENS OF THOUSANDS OF TIRES THAT YOU HAVE EXAMINED OF THE ONES IN WHICH THERE WERE TREAD BELT SEPARATIONS DID YOU EVER FIND THAT OVER THE AREA WHERE THE TREAD BELT SEPARATION INITIATED THAT THERE WAS ACCELERATED LOCALIZED WEAR?
A YES.
Q WAS THAT A TYPICAL KIND OF THING TO FIND FOR A TREAD SEPARATION OF A STEEL-BELTED RADIAL TIRE ON

0032

FORENSIC EXAMINATION?
MR. WARBURTON: OBJECT TO THE FORM, TYPICAL, IMPOSSIBLE TO ANSWER.
Q IN YOUR EXPERIENCE?
A YES, IT CAN BE. IT WOULD DEPEND ON HOW FAST THE SEPARATION OCCURS. IF THE SEPARATION OCCURS REALLY RAPIDLY YOU DON'T HAVE TIME TO DEVELOP LOCALIZED WEAR. IF YOU HAVE A SEPARATION IN THERE AND IT'S THERE FOR AWHILE YOU TEND TO GET IT MORE, IT SHOWS UP MORE THAT WAY.
Q ARE YOU AWARE THAT WHEN COOPER REPORTED BACK THE RESULTS OF ADJUSTMENT DATA TO MANAGEMENT AT THE COMPANY THAT THEY WOULD OFTEN INCLUDE RIDE DISTURBANCE ALONG WITH SEPARATION INQUIRIES?
MR. WARBURTON: OBJECT TO THE FORM OF THE QUESTION, FOUNDATION, LEADING.
A YEAH, I THINK THAT THEY WOULD TEND TO REPORT THE ITEMS THAT WERE THE LARGEST ITEMS BASICALLY IN CATEGORIES, AND TIRE UNIFORMITY ITEMS THEY WOULD REPORT BACK. ONE REASON IS JUST STRICTLY FOR THE UNIFORMITY BECAUSE THAT'S A FUNCTION OF THE FACTORY THAT TESTS THE TIRES, THEY TEST THEM FOR UNIFORMITY, SO THAT WOULD BE ONE FUNCTION. I DON'T KNOW THAT I EVER LOOKED AT UNIFORMITY TIRES DIRECTLY, NO.
Q AND RETURNING TO CLAIMS TIRES FOR A MOMENT

0033

YOU WOULD AGREE WITH ME THAT THE MAJORITY OF CLAIMS TIRES REALLY INVOLVE SOME SORT OF TREAD BELT SEPARATION OR DETACHMENT WHERE THE TREAD OF THE TIRE INTERACTED WITH THE VEHICLE?
MR. WARBURTON: OBJECT TO THE FORM OF THE QUESTION, FOUNDATION.
A IT WOULD BE SOME SORT OF DAMAGE, YES.
Q BASED ON YOUR EXPERIENCE?
A YES.
MR. WARBURTON: OBJECT TO THE FORM, SOME SORT OF DAMAGE.
Q DURING THE COURSE OF YOUR WORK WITH THE LEGAL DEPARTMENT YOU PREPARED OR SIGNED VARIOUS AFFIDAVITS IN REGARD TO LITIGATION, DID YOU NOT, SIR?
A YES.
Q AND DO YOU RECALL THAT THESE WERE PREPARED BY THE LEGAL DEPARTMENT FOR YOUR SIGNATURE?
MR. WARBURTON: OBJECT TO THE FORM OF THE QUESTION.
A GENERALLY THE PROCEDURE THAT WAS USED IS THEY WOULD DRAFT SOMETHING UP, I WOULD REVIEW IT, WE'D MAKE CHANGES IF CHANGES WERE NEEDED AND THEY WOULD BE SIGNED, SO THAT'S BASICALLY HOW THEY WOULD HAPPEN.
IN THE EARLIER YEARS THEY TENDED TO BE MORE INDEPENDENT. IN LATER YEARS THEY TENDED TO BE MORE

0034

SIMILAR I GUESS OR GENERAL.
Q AND DO YOU RECALL THAT ONE OF THE THINGS THAT WOULD BE TYPICAL IN YOUR AFFIDAVITS WOULD BE THAT YOU WOULD ATTEST TO THE FACT THAT YOU'RE FAMILIAR WITH TIRE SPECIFICATIONS AND OTHER DOCUMENTS FORMULATED BY COOPER RELATED TO THE COMPOSITION AND INVENTION OF ITS TIRES IT'S DESIGNED AND MANUFACTURED?
A YES.
Q TYPICAL KIND OF THING?
A YES.
Q ALSO THAT YOU WERE FAMILIAR WITH THE MANUFACTURING PROCESS?
A YES.
Q WHICH YOU HAVE ALREADY TOLD US ABOUT?
A RIGHT.
Q IN YOUR C.V.
A RIGHT.
Q AND YOU WOULD ALSO ADDRESS THE DIFFERENCE BETWEEN DIFFERENT TIRES PRODUCED BY COOPER, WOULDN'T YOU, SIR?
A YES.
Q FOR EXAMPLE, THERE'S DIFFERENCES BETWEEN TIRES IN THE SAME TIRE LINES OF DIFFERENT SIZES EVEN THOUGH THEY MAY ALL BE THE SAME PATRIOT TIRES IF THEY HAD DIFFERENT SIZES OF PATRIOT TIRES THERE WOULD BE

0035

DIFFERENCES IN THOSE TIRES?
A YES, AND THOSE HAVE TO DO WITH THE LOAD CARRYING CAPACITY OF EACH TIRE.
Q OR THE SIZE?
A OR THE SIZE, YES.
Q AND THEY MIGHT BE DIFFERENT TREAD PATTERNS ON DIFFERENT TIRES?
A YES.
Q AND YOU'VE DEALT WITH THE DIFFERENCES BETWEEN TIRES IN YOUR AFFIDAVITS, DIDN'T YOU, SIR?
A YES.
Q YOU ALSO RECOGNIZE THAT THERE ARE COMMON COMPONENTS ACROSS DIFFERENT TIRE LINES AND DIFFERENT SIZE TIRES, DON'T YOU, SIR?
MR. WARBURTON: OBJECT TO THE FORM, FOUNDATION.
A YES.
Q DO YOU RECOGNIZE THAT THERE ARE COMPONENTS THAT ARE COMMON ACROSS TIRE LINES AND SIZES?
MR. WARBURTON: FORM OBJECTION, GENERALITY.
A YES.
Q FOR EXAMPLE, IN A SITUATION WHERE THERE WAS AN ALLEGATION THAT THE SKIM STOCK WAS DEFECTIVE IN THE TIRE AND CAUSED A FAILURE, THEN THAT WOULD APPLY TO ALL

0036

TIRES FOR THAT SKIM STOCK, OR WOULD IT APPLY TO ALL TIRES FOR THAT SKIM STOCK?
MR. WARBURTON: OBJECT TO THE FORM, FOUNDATION.
A I THINK AS FAR AS SKIM STOCK AND BELTS ARE CONCERNED -- YOU'RE TALKING ABOUT BELTS?
Q YES, SIR.
A THOSE WERE SIMILAR IN GROUPS OF TIRES LIKE PASSENGER RADIALS WOULD PROBABLY USE ALL THE SAME BELT MATERIAL. THE BELT MATERIAL WOULD BE CREEL CALENDERED INTO A LARGE ROLL AND THEN VARIOUS TIRE SPECIFICATIONS WOULD BE CUT OUT OF THAT SAME MATERIAL AND GO INTO DIFFERENT TIRES.
AS FAR AS FAILURE, I THINK THAT SKIM STOCK, THE FAILURE OF THE SKIM STOCK IS SOMEWHAT DEPENDENT UPON THE TIRE SIZE, THE TIRE USAGE, THE TIRE LOADS, THE TIRE INFLATIONS, ALL THE OTHER CONDITIONS THAT GO ALONG WITH IT TOO.
Q LET ME TRY THIS WITH A DIFFERENT QUESTION.
AS A TIRE ENGINEER, IF YOU WERE AWARE THAT THE SAME SKIM STOCK WAS USED IN A VARIETY OF TIRES, THE SAME COMPOUND, BOTH IN LIGHT TRUCK AND PASSENGER TIRES, AND YOU WERE HAVING SEPARATIONS IN THOSE LIGHT TRUCK AND PASSENGER TIRES, WOULD YOU ANALYZE THE SKIM STOCK AS A POTENTIAL FOR HAVING CONTRIBUTED TO THAT FAILURE?

0037

MR. WARBURTON: OBJECT TO THE FORM.
A YES.
Q WOULD THAT BE SOLID BASIC GOOD ENGINEERING?
MR. WARBURTON: SAME OBJECTION.
A YES.
Q OKAY. LET'S DO THE SAME THING, ASK THE SAME QUESTION WITH A/O PACKAGE. YOU'RE AN ENGINEER AT COOPER AND YOU HAVE FAILURES AS A RESULT OF AGING OF LIGHT TRUCK AND PASSENGER TIRES AND THEY ALL HAD THE SAME A/O PACKAGE, SO FOR EXAMPLE 525-C, WOULD YOU ANALYZE THAT ASPECT OF THE TIRE'S CONSTRUCTION TO DETERMINE IF IT CAUSED OR CONTRIBUTED TO THE FAILURES?
MR. WARBURTON: OBJECT TO THE FORM, COMPOUND.
A YES.
Q YOU WOULDN'T LIMIT THAT TO JUST ONE SIZE TIRE?
MR. WARBURTON: SAME OBJECTION.
A NO. I THINK AS FAR AS BELT COAT COMPOUNDS, PROBLEMS THAT OCCUR SHOW UP IN CERTAIN SIZES FIRST. I MEAN, THERE ARE SOME TIRES THAT ARE MORE CRITICAL THAN OTHERS AS FAR AS FAILURE MODE AND THE NUMBER OF FAILURES THEY MAY HAVE, BUT IN GENERAL THE BELT COAT WOULD BE CHANGED FOR ALL TIRES BASED ON THAT.

0038

Q LET ME ASK YOU THE SAME QUESTION GENERALLY ABOUT INNER LINERS. LET'S SAY YOU HAD A WIDE RANGE OF TIRES USING THE SAME INNER LINER IN LIGHT TRUCK AND PASSENGER TIRES AND YOU HAD TREAD SEPARATION FAILURES IN THOSE TIRES, WOULD YOU LOOK AT THE INNER LINERS IN THE VARIOUS TIRES OR THAT INNER LINER THAT WAS USED IN VARIOUS TIRES IN ORDER TO DETERMINE WHETHER THAT WAS A CAUSE OR CONTRIBUTING CAUSE TO THE FAILURE?
MR. WARBURTON: FORM OBJECTION, HYPOTHETICAL.
A YES.
Q WHY WOULD YOU WANT TO LOOK AT INNER LINER COMPOSITION OF COMPOUNDS AS RELATES TO TREAD SEPARATIONS?
MR. WARBURTON: FORM OBJECTION.
A WELL, THE INNER LINER KEEPS THE INTERNAL AIR PRESSURE INSIDE THE TIRE. EXCUSE ME, I NEED A DRINK.
Q CERTAINLY. ANY TIME YOU NEED TO TAKE A BREAK, MR. CURRY, YOU DON'T HAVE TO SAY WHY, JUST I NEED TO A BREAK AND WE CAN CERTAINLY DO THAT, ALL RIGHT?
A ALL RIGHT. WHEN I TALK A LOT MY VOICE STARTS TO GIVE UP.
Q I UNDERSTAND THAT.
A OKAY. A LIGHTER COMPOUND PREVENTS THE

0039

INTERNAL AIR PRESSURE FROM MIGRATING THROUGH THE TIRE AS RELATED TO THE PAPER THAT I HAVE AND THE INNER LINER OR THE AIR PRESSURE MIGRATING THROUGH THE TIRE CAUSES OXYGEN DEGRADATION OF THE BELT SKIM STOCK WHICH IS COUNTERACTED BY THE A/O SYSTEM IN THE BELT SKIM STOCK BASICALLY.
SO INNER LINER IS ONE OF THE MORE IMPORTANT ITEMS IN THE TIRE. I WOULD SAY THE BELT AND SKIM STOCK AND THE INNER LINER ARE PROBABLY THE TWO MOST CRITICAL ITEMS WITHIN THE TIRE. SO IF YOU HAVE A PROBLEM YOU THINK IS RELATED TO THE INNER LINER COMPOUND YOU WANT TO GATHER AS MUCH INFORMATION AS YOU CAN ABOUT THAT AND TO SEE WHERE THERE MAY BE A PROBLEM.
IN GENERAL INNER LINER COMPOUND IS USED ON A GROUP OF TIRES, LIKE ALL RADIAL PASSENGER TIRES HAVE THE SAME COMPOUND. YOU MAY HAVE DIFFERENT GAUGES, DIFFERENT AMOUNTS OR THICKNESSES OF THE INNER LINER IN DIFFERENT TIRES, BUT THAT'S PRETTY MUCH THE WAY IT'S DONE.
Q LET ME ASK YOU ANOTHER QUESTION ABOUT INNER LINERS, MR. CURRY. YOU HAD TALKED ABOUT THE FACT THAT THAT'S WHAT KEEPS THE AIR FROM MIGRATING INTO THE TIRE AND CAUSING OXYGEN DEGRADATION?
A YES.
Q IN MOST STEEL-BELTED RADIAL TIRES ON THE

0040

HIGHWAY TODAY WHAT IS INSIDE THE CARCASS OF THE TIRE, WHAT'S USED TO INFLATE IT?
A STANDARD AIR PRESSURE.
Q COMPRESSED AIR?
A YES.
Q AND DOES COMPRESSED AIR HAVE MOISTURE IN IT?
A YES.
Q IS THERE ANY PURPOSE IN THE INNER LINER TO PREVENT MOISTURE FROM MIGRATING INTO THE TIRE?
A WELL, THE COMPOUND DOES PREVENT SOME OF THAT.
Q ALL RIGHT.
A BUT AS FAR AS I KNOW, EVERY TIRE THAT I KNOW OF ALLOWS OXYGEN AND MOISTURE THROUGH THE INNER LINER.
Q THERE'S NO WAY TO REALLY STOP THAT?
A NO.
Q AS I UNDERSTAND IT, WHAT YOU'RE TRYING TO DO WITH THE INNER LINER IS MINIMIZE THAT MIGRATION OF OXYGEN AND MOISTURE?
A YES.
Q WHY DO YOU NOT WANT MOISTURE TO MIGRATE? AND YOU ALREADY EXPLAINED WHY YOU DON'T WANT OXYGEN TO MIGRATE AND WHY DO YOU WANT TO PREVENT MOISTURE FROM MIGRATING THEN?
A WELL, THE MOISTURE CAN AFFECT THE BELT WIRE BASICALLY. IT CAN CAUSE LOWER ADHESION BETWEEN THE

GEORGE MOSS V. COOPER TIRE & RUBBER COMPANY

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

Civil Action No.: 3:11-CV-00689-FLW-LHG

PLAINTIFF'S EXHIBIT H

SEE BATES NOS. CCMOSS_G0001775-1816